

TRANSLOAD, TRANSPORT & DISPOSAL WORK PLAN



JORGENSEN FORGE EARLY ACTION AREA

Jorgensen Forge Corporation Property
Seattle, WA

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Jorgensen Forge Early Action Area
Removal Action Work Plan

Table of Contents

1.0 INTRODUCTION.....	1
1.1 TTD SITE LOCATION, HISTORY AND BACKGROUND	1
1.2 OVERVIEW OF THE TTD WORK PLAN.....	2
2.0 STAFFING/KEY PERSONNEL	2
2.1 ROLES AND RESPONSIBILITIES	2
2.2 KEY AND LEAD PERSONNEL.....	3
3.0 MANAGEMENT OF PROJECT GENERATED WASTES.....	4
3.1 SHORELINE AND UPLAND EXCAVATED SOILS AND DEBRIS	4
3.2 DEBRIS REMOVED FROM SHORELINE AND UPLAND AREAS	4
3.3 DREDGE SEDIMENTS REMOVED FROM LOWER DUWAMISH WATERWAY.....	5
3.4 BARGE MOVEMENT TO AND FROM PPM YARD	5
3.5 BARGE MOVEMENT AT TTD FACILITY.....	5
3.6 BARGE TRANSLOADING/TRUCK & TRAILER LOADING	5
3.7 TRANSLOADING OF SUBTITLE C SEDIMENT	7
4.0 WASTE TRACKING AND DISPOSAL	7
4.1 WASTE FOR ALTERNATE DAILY COVER (ADC) OR BENEFICIAL REUSE	8
4.2 SOIL MIXED WITH LESS THAN 10% DEBRIS TO BE USED AS ADC	8
4.3 SOIL MIXED WITH UP TO 50% DEBRIS TO BE USED AS BENEFICIAL REUSE	8
4.4 WASTE EXCEEDING 50% DEBRIS.....	9
4.5 DREDGE SEDIMENTS AND DEBRIS REMOVED FROM THE LOWER DUWAMISH WATERWAY	9
5.0 STORM WATER MANAGEMENT	9
5.1 STORM WATER POLLUTION PREVENTION PLAN	10
6.0 HOUSEKEEPING AND SPILL RESPONSE.....	10
7.0 PERMIT INFORMATION.....	10
8.0 BEST MANAGEMENT PRACTICES (BMP)	12
9.0 FIGURES	13
9.1 FIGURE 1: VICINITY MAP.....	14
9.2 FIGURE 2: TTD FACILITY	15
9.3 FIGURE 3: BARGE OFFLOAD EXCAVATOR.....	16
9.4 FIGURE 4: SITE PLAN	16
9.5 FIGURE 5: TRUCK ROUTE SITE TO ASTS.....	17
9.6 ANIMATION OF BOEING DREDGE, TRANSLOAD, TRANSPORTATION PROCESS	18
10.0 PERMITS.....	19
10.1 ATTACHMENT A: KING CO. SOLID WASTE FACILITY PERMIT	20
10.2 ATTACHMENT B: STORMWATER PERMIT	21
10.3 ATTACHMENT C: RCRA PERMIT.....	22

1.0 Introduction

This Work Plan describes implementation actions for the removal of polychlorinated biphenyls (PCB) impacted sediments from the Jorgensen Forge Early Action Area at approximately River Mile 3.6 in the Lower Duwamish Waterway, located in Seattle, Washington. The project is expected to remove an estimated 12,500 cubic yards (CY) of dredge sediment over the course of one in-water construction window and 3,500 CY of shoreline bank soils. A typical in-water construction window for this river starts no earlier than August 1 and runs through February 15; however this project must have in-water work completed by September 6, 2014 to eliminate impacts to Tribal Treaty Fishing activities in the LDW.

Pacific Pile and Marine (PPM) has been selected by Earl M. Jorgensen (EMJ; Owner) to perform this remedial action work including the Dredge Material and Upland Material Transload, Transport and Disposal (TTD) services. PPM has selected Waste Management as the disposal service provider for this work.

Once material barges are loaded with Subtitle D dredge sediment and dewatered at the water treatment barge, they will be transported down river to the PPM yard for offloading to truck and trailers for transport to ASRF. The primary method of transload of dredge sediments from the TTD site and upland soil and debris from the Jorgensen Forge Property will be via 30-ton capacity truck and trailer combinations hauling to the WM Alaska Street Reload Facility (ASRF) located at 70 S. Alaska Street in Seattle, WA for reload into gondola rail cars and transported to Columbia Ridge Landfill (CRL) for disposal. Sediments will be unloaded from the gondola cars at the landfill and used for daily cover or beneficial reuse.

Schedule A TSCA and non TSCA dredge sediment will be loaded directly into a lined container mounted on a truck chassis located directly adjacent to the work area. Once each container is loaded, it will be transported to the ASRF where the container will be loaded onto a railcar for transport to the Chem NW facility for stabilization and disposal.

1.1 TTD Site Location, History and Background

The PPM yard located at 700 S. Riverside Dr., Seattle, Washington 98108 in King County will be used for transloading the Subtitle D impacted materials dredged from the Jorgensen Forge Early Action Area. The PPM yard site is located on the west shore of the Lower Duwamish Waterway across from Slip 4, less than 1 mile downstream from the Jorgensen Forge EAA.

The PPM yard facility is an approximately 1 acre waterfront industrial site which is located northeast of the intersection of 7th Avenue South and South Holden Street in the Southpark Neighborhood of Seattle. The yard includes PPM's home office building,

shop area, unpaved gravel surfaced yard together with 13,000 square feet of pile supported pier and 260 linear feet of waterfront wharfage.

The PPM Yard has a long history as an industrial yard and material handling facility. The space has been occupied continuously since the 1960's by marine contractors including Hurlen Construction, American Civil Constructors and Pacific Pile & Marine. Materials including Subtitle D and Subtitle C have been transloaded at the yard for the following projects:

- Pacific Sound Resources for USCOE 2005
- Intalco Pier Repair – 2013
- Maxum Petroleum Pier Upgrades
- Seahurst Park Restoration Project Phase 2 - 2013
- Olympia Yacht Club Dredging – 2013
- Harper Pier Removal – 2012

1.2 Overview of the TTD Work Plan

This Work Plan describes the process for the safe and efficient transfer of material removed from the shoreline bank, or dredged from the Lower Duwamish Waterway into sealed barges, lined containers, or lined vehicles for transport to CRL, Chem Waste or facility for disposal at the landfill. At a minimum, this work plan will address the following:

1. Staffing / Key Personnel
2. Management of Project Generated Wastes
3. Transload Operations
4. Waste Tracking and Disposal
5. Housekeeping and Spill Response
6. Storm water management
7. Permits
8. BMP's to prevent possible releases

2.0 Staffing/Key Personnel

PPM will provide all offloading expertise and equipment as well as coordination for hauling and disposal of shoreline bank soils and debris at the Jorgensen Forge site, along with all of the offsite transport and disposal expertise and equipment. PPM will complete and submit all project required plans and submittals as related to the TTD operations. PPM Project Manager, Greg Anderes will function as the primary point of contact to EMJ and Anchor.

2.1 Roles and Responsibilities

As the prime contractor for the TTD operations, PPM has the overall responsibility for the TTD operation including management, health and safety, environmental compliance,

sampling and testing, manifesting, tracking, submittals, and transportation and disposal. PPMs Yard Manager, Donny Gilbertson, or his designee will be onsite during all loading and hauling operations. PPM will perform any solidification and transport vehicle load out procedures. Additional onsite personnel will be added on an as needed basis. Waste Management will provide containers and stabilization for disposal of Subtitle C material as well as transportation from the rail loading facility for both Subtitle D and Subtitle C materials. PPM will employ Boyer Towing to transfer barges between the project site and the TTD site. PPM will coordinate all material trucking for the project.

2.2 Key and Lead Personnel

Greg Anderes, PPM Project Manager. Over 13 years in managing remediation and marine related projects ranging to \$25M. Greg will be involved with the project from start to finish including submittals, scheduling, issuing contracts and procuring materials. Greg will also be on site full time during the construction process working with Superintendents, suppliers and subcontractors.

Marty Locke, PPM Superintendent. Over 28 years in construction and 25 years in marine construction as an operator, Foreman and Superintendent. Marty will coordinate vessel transport with the towing subcontractor as well as transload yard manager and Project Site Foremen to ensure that work remains on schedule. Marty will also ensure that Best Management Practices for loading, transloading and transporting are being implemented.

JC Clark, PPM Project Engineer/CQC Manager. JC has grown up in the marine construction industry and has managed several successful remediation and dredging projects. JC will also be on site full time during construction as well as assisting with stormwater permitting, submittals and working with trucking subcontractors.

Joseph Adami, PPM Safety Manager. With over 17 years as a Safety Manager, Joseph will assist in setting up the project and ensuring that the Project Manager has the necessary resources related to safety and compliance. Joseph will ensure that all safety programs and procedures are implemented. Joseph will also monitor the effectiveness of the Safety Program and make changes and provide training as needed.

Donny Gilbertson, PPM Yard Manager. With 20 years in the Pile Driver trade and over 5 years with PPM, Donny oversees the yard and ensures all temporary erosion and sediment control ESC measures are in place and effective. Donny is responsible for the offload crew and the transload operation from barge to truck for transport to the WM ASRF.

Matt Essig, WM Industrial Account Manager Over years 24 of experience within the Environmental Industry with 2.5 years of experience with WM, Matt will be

coordinating with the disposal and transfer facilities to ensure trucks and rail cars are not held up at WM's ASRF and the landfill. Matt will also assist with management of the contract between EMJ / PPM and Waste Management.

Boyer Halverson, Operation Manager, Boyer Towing. Boyer will coordinate with the PPM Superintendent and tugboat operators to ensure swift barge transportation between the project site and the PPM yard. Boyer will take the lead in coordinating with other boat and barge traffic on the Lower Duwamish Waterway. Boyer will also ensure that prop wash scouring is minimized by sizing the tugs appropriately, using shallow draft tugs and making sure the tug captains use minimal throttle when positioning barges in shallow water.

3.0 Management of Project Generated Wastes

3.1 Shoreline and Upland Excavated Soils and Debris

Soil mixed with up to 50% debris, sized to no greater than 2' x 2', excavated from the shoreline and upland areas within the Jorgensen Forge property will be loaded, either from stockpiles, or from point of excavation directly into lined dump truck and trailer combination for transport to WM's ASRF. The trucks and trailers will be lined with 6-mil poly sheeting by PPM personnel at the designated liner installation area, prior to placement of the soil and debris into the trucks. The initial scoops will contain only soft material free of heavy, large, or sharp objects in order to protect the haul vehicle bed liner from damage. The haul vehicles will be equipped with auto tarping systems and all loads will be covered prior to leaving the Jorgensen Forge property. Haul vehicles will be inspected to ensure no soil or debris is on the outside, or on the tires. A wheel wash will be installed and used to remove any remaining soil from the truck tires as needed prior to leaving the site. Drivers will be given a copy of the profile for the type of waste being hauled prior to leaving the loading area.

Upon arrival at the ASFR, the loads will be weighed on certified scales and drivers directed to tipping areas inside or near the buildings. After the loads have been dumped in the designated areas, the haul vehicle will return to the scales for an empty weight. Weight of the material unloaded at ASRF will be determined by the difference between the initial weight of the vehicle and material, and the empty weight of the vehicle. Weights will be tracked on the Waste Tracking Log.

3.2 Debris Removed from Shoreline and Upland Areas

Waste Management will provide containers, transportation and disposal for debris removed from the project. 40' open top containers will be delivered to the project site by trucks. Containers will be loaded at the Jorgensen Forge property and hauled to Union Pacific's ARGO Rail yard where the containers will be placed on rail cars and shipped to

CRL for disposal.

3.3 Dredge Sediments Removed from Lower Duwamish Waterway

PPM dredge operations are normally scheduled to work seven days per week, 12 hours per day. However dredge crews, disposal crews, and upland excavation crews may be staggered due to tides and other constraints effectively creating a longer overall work day. PPM will remove sediments from the river using a closed environmental bucket and place the sediments into barges. Free water accumulating in the barges during dredging operations will be pumped off to the extent practical, by the dredging contractor, prior to delivery of the barge down river to the TTD facility. Dewatering and treatment activities are described in the RAWP.

PPM will provide and operate the PPM Yard that will be configured and staffed to support the dredge material transloading operations. The average daily dredge production rates are expected to be a minimum 600 cubic yards (CY)/day (700 tons/day). Operators will be at the PPM Yard to transload dredge material from the barges during 10 hour shifts (schedule to be coordinated with dredging Foreman). Dredge material in barges received during these shifts will be transloaded within 6 hours after they are received at the PPM Yard. In cases where a barge is received outside of the normal operator shift, it will be emptied during the next scheduled shift. An “empty” barge shall contain no more than 5 CY of dredged material.

3.4 Barge Movement To and From PPM Yard

Barges will be delivered to the PPM Yard dock, and removed from the dock by PPM tug contractor, Boyer Towing. Transfer and placement of the barges at the PPM Yard dock will be performed by Boyer Towing using river current and minimum thrust so as not to cause damage to the Yard dock and/or pilings, and reduce prop wash and turbidity during movement of the barges. The tug contractor will remove empty barges from the PPM Yard within 24 hours of notice from PPM that the barge is empty and ready for removal from the TTD facility in accordance with project requirements. Barges will be returned to the dredge by the tug contractor to be refilled again with dredged sediments. Barges will be unloaded at an average rate of 100 - 120 tons per hour depending on the amount of debris and free liquids on the barge.

3.5 Barge Movement at TTD Facility

PPM will be responsible for fleeting of barges along the dock at the PPM Yard. Barges will be moved along the dock, using small push tugboats to facilitate unloading of the barges, and movement of empty barges for access to the next full barge in line for unloading. Barges will remain tied to the dock with a minimum of one dock line, or remain in contact with the small push tugboat during fleeting operations. At no time will barges be released from the dock and moved away from the dock to facilitate placement of another barge along the dock, unless the barge is under the control of the tug contractor.

3.6 Barge Transloading/Truck & Trailer Loading

A Komatsu 1000 hydraulic excavator will be used for barge offloading Subtitle D

sediment at the PPM Yard. The 1000 is a 640 horse power machine outfitted with a 4 cubic yard hydraulic clamshell bucket. The bucket is a fully enclosed “rehandle” bucket specifically built for bulk material handling applications. The bucket will swing from the barge to haul truck above a specially fabricated spill apron. This apron prevents any loss of material that may be stuck to the outside of the bucket from entering the waters of the Lower Duwamish Waterway.

The dredge material will be unloaded directly from the barge into haul trucks – no material will be stockpiled on the ground. A spotter will be positioned on the wharf to observe the bottom of the clamshell bucket. The 1000 excavator operator will only proceed with moving the loaded clamshell to the haul truck after approval from the spotter to minimize the potential for dripping and a good seal of the clamshell bucket.

The 1000 excavator is also equipped with lights allowing for off-loading operations to continue during night time hours. The same precautions implemented during daytime operation will take place during night operations but with increased vigilance. These precautions will include, but not be limited to, the use of a spotter in radio communications with the excavator operator to verify each bucket load, utilization of the spill apron, and 20-mil poly sheeting on the deck in the line of travel for the clamshell bucket from the barge to the haul truck or trailer. The sheeting will be monitored continuously during offload operations and damaged sections will be repaired or replaced immediately. If any material is collected on the sheeting it will be cleaned or properly disposed of at the end of the shift.

In the event the offload excavator breaks down, or is in need of maintenance, repairs will be made in the most expeditious manner possible. A supply of critical and non-critical spare parts, for repair and maintenance of the excavator, along with qualified personnel, will be available on site. Every attempt will be made to bring the offload excavator back into service as quickly as possible to allow for smooth and continuous transloading of barges at the PPM Yard.

The spill apron slopes such that any material that is spilled from the clamshell bucket slides back to the barge. Any water collected as a part of the offload process will be collected in a water storage tank staged on-site and in the event of a unseasonable rainfall event or other unforeseen problem with the containment system.

The barges will contain 5 CY maximum of dredged material on barge between intermediate trips. The PPM Yard crane (Figure 2) will be utilized to lift mobile equipment (up to a John Deere 844 front end loader) onto the barges for final cleaning, if necessary.

All oversized debris material will be rigged separately and off-loaded from the barge and staged in a lined area at the PPM Yard for sizing before being loaded directly into trucks for disposal. Oversized wood debris will be cut to acceptable lengths using chainsaws, hydraulic shears, or other practical means. Oversized metal debris will be sized using cutting torches, hydraulic shears, or other practical means. The debris staging area will be covered with 6-mil poly to capture all sediments that may be contained in the debris. Poly liner will be visually inspected daily and any damaged areas will be replaced. Sediments will be removed from the debris staging area as needed and disposed of. Any

water that accumulates in the debris staging area will be pumped to the onsite water treatment system specifically set up for this project and treated prior to discharge to the POTW in accordance with the permit issued by King County or may be collected, transported, and disposed at an appropriately permitted facility.

In the event that displaced dredge material is released into the waterway during barge off-loading or transload operations at the PPM Yard, EMJ and Anchor QEA, and all appropriate agencies will be notified immediately per the appropriate notification process. The location of the release will be documented, and a corrective actions plan will be submitted to the Owner's Project Engineer for approval. The Owner's Project Engineer will coordinate with the Owner and Owner's Project Coordinator and they will communicate as necessary with EPA.

3.7 Transloading of Subtitle C Sediment

All TSCA and non-TSCA Subtitle C Disposal Sediment will be loaded directly to poly lined containers located on flat deck material barges. Upon completion of Schedule A sediment removal, the container barge will be transported by push tug to the PPM Yard TTD facility. The containers will be picked from the barge deck using an American 9310 crawler crane and placed directly on truck chassis for immediate transportation. The crane will be inspected daily and operated by a NCCCO certified operator. (National Commission for the Certification of Crane Operators)

4.0 Waste Tracking and Disposal

No waste will leave the Jorgensen Forge or PPM Yard without being accompanied by a copy of the approved waste profile for that particular type of waste. The waste profiles are generated and issued by WM from information provided by the generator (EMJ) who certifies the information is correct and representative of the waste.

All waste going through WM's ASRF facility for disposal at Columbia Ridge Landfill, a Bill Of Lading (BOL) will be generated when the cars are released to the railroad. This BOL will accompany the waste to the landfill and for debris going to Wenatchee; a nonhazardous manifest will be generated and given to the driver for each load. TSCA material will be transported in open top containers to the Union Pacific Rail Yard located at 402 South Dawson Street, Seattle, WA 98134. There it will be transloaded onto railcars for transport to Chem Waste located at 17629 Cedar Springs Lane, Arlington, OR 97812

Waste that is delivered to ASRF from the Jorgensen Forge Early Action Area will be mixed with waste delivered from other projects, loaded into rail cars and sent to Columbia Ridge Landfill for disposal. A waste tracking log will be developed showing the loads leaving the Jorgensen Forge property. Weights from the scale tickets received from ASRF for the waste that is delivered from the project will be added to the waste tracking log and serve as the Cradle to Grave documentation.

ASRF will comingle the waste with waste from other projects to be sent to the landfill. Once the waste is comingled and placed in the rail car, tracking the exact quantity of Jorgensen Forge Early Action Area waste in each rail car received at the landfill becomes impossible. The comingled waste in the rail car leaving ASRF is tracked with the BOL for the rail car.

Waste tracking logs will be updated by the Project Superintendent on a daily basis as information is received from ASRF, Chem Waste, or the landfill. The waste tracking logs will be provided to the Owner's Project Engineer for approval and he will coordinate review and approvals.

4.1 Waste for Alternate Daily Cover (ADC) or Beneficial Reuse

The Waste Management Subtitle D, Columbia Ridge Landfill & Recycling Center (CRLF) in Arlington, Oregon is the final destination for most materials managed at ASRF. Certain materials may be used for alternate daily cover and/or beneficial reuse at CRLF. These materials are identified on the waste profile, and the Scalehouse Attendant directs the driver to a designated tipping location inside Building 1 or Building 2. Once tipped, the materials are stored in a pile, and later loaded into marked gondola rail cars for shipping. Upon leaving the building, trucks will pass through a truck wash station to clean any waste material from the tires or under carriage. Water from the truck wash is pumped to an onsite water treatment system, treated and discharged in accordance with the permit issued by King County.

Gondola rail cars are placed inside of the building, where they are loaded using a front-end loader or similar equipment. Any excess moisture in the pile will be managed by mixing in drier material prior to loading into rail cars. Dedicated equipment will be used inside the building so decontamination of the equipment will not be required unless the equipment is removed from the building. An entire gondola is designated for either ADC or Beneficial Reuse, and these gondolas are marked to prevent inadvertent mixing of materials. Once safety and environmental checks are complete, the Site Manager or Site Supervisor releases the gondolas to the rail for shipment. Full gondolas are shipped under a shipping non-hazardous manifest that tracks the gondolas and identifies its contents by car number. The receiving facility matches car numbers and manifests ensure that it is handled according to instructions as either ADC or Beneficial Reuse.

4.2 Soil Mixed with Less Than 10% Debris to be used as ADC

Soil mixed with less than 10% debris shipped by truck and trailer from the Jorgensen Forge site to ASRF will be weighed upon arrival, and again after the loads have been tipped. Tonnage for the load will be calculated using the loaded and light weights as recorded on the certified scales at ASRF. Truck logs will be generated as the trucks leave the project site, and weights of each loads will be added to the logs at the end of each day based on weights recorded at ASRF. Tonnage for each load, as determined by weight recorded at ASRF, will be used to calculate disposal costs. See Figure 12

4.3 Soil Mixed with up to 50% Debris to be used as Beneficial Reuse

Soil mixed with up to 50% debris shipped by truck and trailer from the Jorgensen Forge

site to ASRF will be weighed upon arrival, and again after the loads have been tipped. Tonnage for the load will be calculated using the loaded and light weights as recorded on the certified scales at ASRF. Truck logs will be generated as the trucks leave the project site, and weights of each loads will be added to the logs at the end of each day based on weights recorded at ASRF. Tonnage for each load, as determined by weight recorded at ASRF, will be used to calculate disposal costs. See Figure 12.

4.4 Waste Exceeding 50% Debris

Waste exceeding 50% debris shipped by truck and trailer from the Jorgensen Forge site to WM's Greater Wenatchee Regional Landfill (GWRL) will be weighted upon arrival at the landfill, and again after the loads have been tipped. Tonnage for the load will be calculated using the loaded and light weights as recorded on the certified scales at GWRL. Truck logs will be generated as the trucks leave the project site, and weights of each loads will be added to the logs at the end of the next day based on weights recorded at GWRL. Tonnage for each load, as determined by weight recorded at GWRL, will be used to calculate disposal costs

4.5 Dredge Sediments and Debris Removed from the Lower Duwamish Waterway

Dredge sediments and debris removed from the Lower Duwamish Waterway will arrive at the PPM Yard to be transloaded into truck and trailer for transfer to ASRF. . A truck log will be generated by the PPM Superintendent responsible for offloading in order to track each load as the trucks leave the PPM Yard. Weights of each load will be taken at the ASRF scales and those scale records will be matched to the truck logs. The scale tickets generated at the ASTF are the official weights used for calculating disposal quantities and billing purposes.

5.0 Storm Water Management

The dredge material handling will take place in an exclusion zone that is bermed off and completely isolated from the remainder of the PPM Yard storm water management system. A Spill Apron Containment Area (SACA) on the pier, in the path of the waterfront excavator bucket travel, will be covered with 20 mil poly sheeting, capped with a sand/gravel mix and topped with steel road plates to contain any drips or spills that may occur during off-loading of the barges and facilitate cleanup. See Figure 2 . Any water collected on the SACA will be pumped into the 18,000gallon water collection system located in the yard. The Truck Loading Containment Area (TLCA) will be similarly constructed consisting of an area 100' x 20' raised edge, with poly liner and sand/gravel cover, capped with steel road plates. This area will contain the occasional splatter caused by the truck loading operation and prevent the contaminated material from

entering the site stormwater system. Water collected in the TLCA will drain to a low lying sump area and will be pumped into the 18,000gallon water collection system located in the yard.. The amount of rainwater is anticipated to be minimal. The Seattle area receives 1.6 inches of rain on average in September. This equates to 200 gallons per month for an area 20' x 100'. The sump area will be inspected daily and pumped down as necessary to prevent overtopping of the TLCA containment.

5.1 Storm Water Pollution Prevention Plan

A detailed Storm Water Pollution Prevention Plan for both the Project Site and PPM Yard will be submitted as a part of this overall RAWP.

6.0 Housekeeping and Spill Response

Daily maintenance and routine housekeeping will be performed to maintain a clean and safe work area. If spills should occur, they will be addressed immediately by the operators on duty. Shoveling, sweeping and wash down will be utilized as necessary to keep all areas outside of the Exclusion Zone clean.

Daily inspection of the dredge handling work area will be conducted. Any repairs or discrepancies will be corrected immediately and reported to WM.

The dredge material handling work area is contained and isolated from the PPM Yard storm water management system. All storm water falling on this footprint and all wash water used for housekeeping will be collected, treated and discharged to the POTW in accordance with the permit issued by King County or collected, transported, and disposed at an appropriately permitted facility.

7.0 Permit Information

All of the WM facilities proposed for off-site disposal or recycling of hazardous and non-hazardous materials are in compliance with the CERCLA Off-Site Policy (40 CFR 300.440). WM ASRF facility is not a disposal site for the waste generated from this project. However, ASRF is approved to transfer the waste as long as it does not stay at the ASRF facility for longer than 10 days, and manifests move with the waste to the disposal site.

EPA Region 10 does not issue letters of authorization to disposal sites. Any generator can call EPA to confirm the authorization for any facility on question.

The PPM Yard located at 700 S. Riverside Drive, Seattle WA, 98108, 206-331-3873, is a permitted facility for the handling of dredge materials. PPM is currently in the

possession of the following permits and approved plans:

- WM Alaska Street Reload Facility is a permitted facility located at 70 S. Alaska Street, Seattle WA, 98134, 206-763-5025, currently in the possession of the following permits:
 - Solid Waste Facility Permit for Storage / Treatment Piles, #PR000049443, issued by Seattle and King County Public Health to WM Alaska Street Reload Facility, dated March 2013, Effective: January 1, 2013, Expires: December 31, 2013
 - Environmental Protection Agency Identification Number: WAH 000 018 796
- WM Columbia Ridge Landfill is a permitted facility located at 18177 Cedar Springs Lane, Arlington, OR 97812, 541-454-3201 currently in the possession of the following permits:
 - Solid Waste Disposal Site Permit, Addendum 3, issued by Oregon Department of Environmental Quality to Columbia Ridge Landfill, dated August 20, 2012, Permit Expiration date, July 1, 2017, Addendum Expiration date, October 1, 2015.
 - Environmental Protection Agency Identification Number: ORD987173457
- WM Greater Wenatchee Regional Landfill is a permitted facility located at 191 S. Webb Road, East Wenatchee, WA 98802, 509-244-0151, currently in the possession of the following permits:
 - Combined Operating Permit for Municipal Solid Waste Landfilling and Solid Waste Handling Facility, issued by Chelan-Douglas Health District to Greater Wenatchee Regional Landfill, dated July 11, 2008, renewal date, November 1, 2012, expiration date, July 10, 2018.
 - Environmental Protection Agency Identification Number: WAD 980 722 193
- WM Chemical Waste Management Landfill is a permitted facility located at 17629 Cedar Springs Lane, Arlington, OR 97812, 541-454-2643, currently in the possession of the following permits:
 - Hazardous Waste Permit for the Storage, Treatment, and Disposal of Hazardous Waste, issued by Oregon Department of Environmental Quality, dated August, 2006, expires August 2016.
 - Environmental Protection Agency Identification Number: ORD 089 452 353
- Industrial Stormwater General Permit Number WAR301516 issued by State of Washington Department of Ecology for the Pacific Pile and Marine Yard located at 700 S Riverside Dr., Seattle, WA 98108
- Resource Conservation and Recovery Act (RCRA) Registration Site ID issued by the State of Washington Department of Ecology for 700 S Riverside Drive, Seattle, WA 98108.

8.0 Best Management Practices (BMP)

Transload Best Management Practices (BMP)

Activity	Risk	BMP
Transportation of Barge to TTD Facility	<ol style="list-style-type: none"> 1. Water & Sediment loss over barge walls 2. Water & Sediment loss through scupper holes 	<p>Stack sediment on barge so a minimum 12" gap is maintained from top of sediment to top of barge walls. Remove all standing water from sediment barge prior to transporting barge from dredge area to transloading facility.</p> <p>Remove any sediment from the outside walkways of the barge and/or top of the barge walls prior to transportation. Scupper holes will be welded shut with steel plates. The plates will be tested prior to sediment loading to ensure watertight seal is achieved.</p>
Placement of barges at TTD facility	<ol style="list-style-type: none"> 1. Prop wash 2. Unnecessary turbidity 3. Damage to TTD facility dock and pilings 	<p>Transfer and placement of the barges at the TTD facility dock will be performed by the tug contractor using river current and minimum thrust so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbidity during movement of the barges.</p>
Movement of barges along TTD facility dock	<ol style="list-style-type: none"> 1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 	<p>Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care will be taken during barge movement to ensure no damage is caused to the TD facility dock or pilings. Barges will remain tied to the dock with a minimum of one dock line during fleeting operations. At no time will</p>

Activity	Risk	BMP
	4. Control of barges while moving	barges be released and moved away from the dock to facilitate placement of another barge along the dock, unless the barge is under the control of the tug contractor.
Unloading of dredge material from barges at TTD facility	1. Spill or dripping dredge material on dock 2. Dredge material introduced into site storm water system 3. Spill of dredge material into the river	<p>A 20'x16' spill apron will be placed at the edge of the dock and reach approximately 1/3 of the width of the barge – material transfer will occur within this width. The apron will be angled to both the barge and the footing of the apron. The apron has walls on each side to ensure material does not slide off of the sides of the apron. The apron will be cleaned at the end of shift or as needed to manage the potential for sediment build up.</p> <p>The material will be shifted on the barge via a front-end loader to manage its position on the barge. The loader operator will help ensure that sediment does not exceed the 12" clearance from top of sediment to the top of barge walls. The barge will also be shifted via a small push tug to make sure that material is not removed from a single area in the barge that can result in a sudden shift causing material to over-run the barge walls.</p> <p>A submersible pump and 18,000 gallon weir tank will be readily available at the transload facility if any additional dewatering is needed from within the</p>

Activity	Risk	BMP
		<p>sediment haul barge. It is not anticipated that free standing water will be present on the barges due to the active dewatering performed during dredging operations.</p> <p>A spill apron containment area will be created (Figure 2) to enclose the footing of the spill apron and directly adjacent excavator. The containment area will first be lined with a 20mil PVC (or similar) liner. A one-high wall of ecology blocks will then be placed around the four sides of the containment area. Another 20mil liner will then be placed over the entire containment area including the ecology blocks. A layer of crushed rock will be placed over the liner to protect it from tears. Steel road plates will be placed upon the crushed rock in order for any spilt sediment to be easily removed via shovels and brooms. The containment area will capture any sediment that may inadvertently fall from the excavator bucket as well as any rainwater that comes in contact with the sediment. The containment area will be cleaned of sediment and water regularly to prevent any potential build up.</p> <p>In the unlikely event dredge materials were to spill off the barge and enter the waterway during unloading operations, the location and amount of the misplaced material would be</p>

Activity	Risk	BMP
		recorded and provided to the Owner's Project Engineer and he would coordinate accordingly with the Owner and all appropriate agencies.

Activity	Risk	BMP
<p>Transfer of dredge material from containment vault to haul vehicles.</p>	<ol style="list-style-type: none"> 1. Spread of contamination off site 2. Dredge material in on-site WWT systems 	<p>A truck-loading containment area will be constructed directly in front of the spill apron (Figure 2) to capture any sediment inadvertently loss during the loading of the disposal trucks and trailers. The truck-loading containment area will be built using crushed rock to build a 6-12" berm around the four sides of the area. A 20mil liner will be placed over the berm and steel plates will be placed over the liner to protect it from the truck movement across it. The steel plates will be cleaned as necessary throughout the day to remove any sediment loss during the truck loading process. The sediment recovered will be placed directly into the trucks for disposal. In the event of heavy rainfall a small submersible pump will be used to remove any rainwater that collects in this area. The water will be conveyed to an 18,000 gallon baker tank.</p> <p>Haul vehicles used to transport remediation waste will have adequate liners, or will otherwise sufficiently watertight, to prevent any incidental liquids from leaking from the boxes or containers during transport. Liners will be installed in the haul vehicles, at an established liner installation station that provides adequate access and fall protection during liner installation. Each liner will be visually inspected, prior to</p>

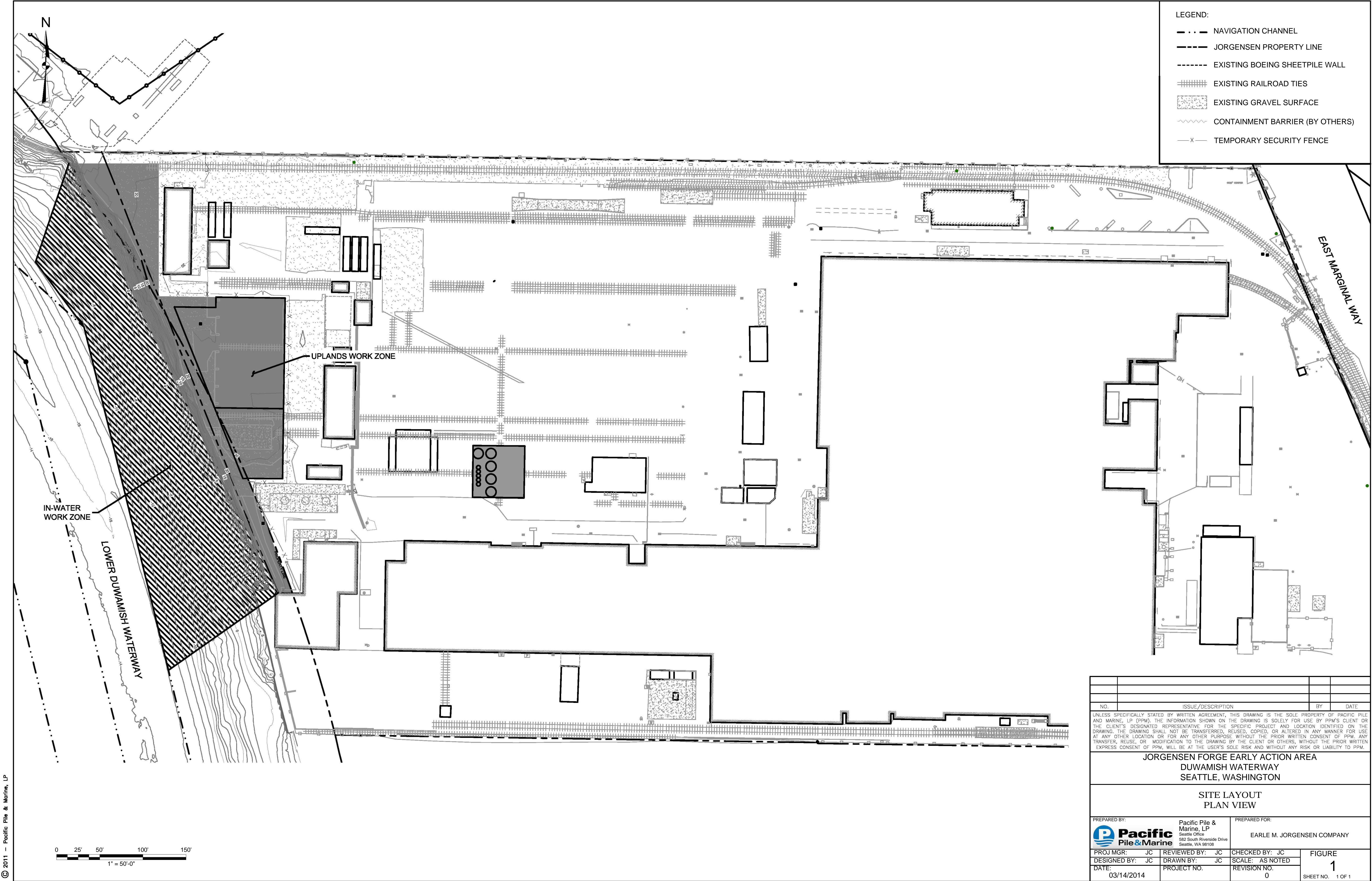
Activity	Risk	BMP
		<p>loading the haul vehicle, to ensure liner integrity.</p> <p>The exterior of the haul vehicle will be inspected prior to leaving the loading area to ensure no dredge materials are on the outside and that the containers are sealed and not leaking. Any spilled dredge material or materials generated from cleaning the exterior of the trucks will be recovered and placed directly back into the truck bed. Water that comes in contact with dredge material during haul vehicle loading operations will be collected, treated and discharged to the POTW in accordance with the permit issued by King County or collected, transported, and disposed at an appropriately permitted facility.</p> <p>The dredge material handling work area is contained and isolated from the rest of the facility. All storm water falling on this footprint and all wash water used for housekeeping will be collected and treated then discharged to the POTW in accordance with the permit issued by King County or collected, transported, and disposed at an appropriately permitted facility.</p> <p>A 20'x50' woven geotextile fabric will be placed at the egress of the Yard. Rumble strips will be placed at the beginning of the fabric to</p>

Activity	Risk	BMP
		<p>remove any heavy sediment from the truck wheels. The trucks will then continue on through the geotextile to remove any fine material from the wheels. The geotextile will be replaced daily and/or as needed to facilitate removal of fines.</p> <p>A wheel wash may or may not be used as a final sediment removal process at the Yard. Due to the unpaved nature of the street end of Holden Street, historically wheel washes have generated turbidity due to the wet wheels and undercarriage tracking large amounts of water onto the soil of the street end. With a large quantity of trucks coming in and out of the Yard enough water will be generated to cause a significant stream of turbid water to flow to the catch basins located at the intersections of Holden Street and 7th. A wheel wash may be installed at the egress of the Yard but it will be evaluated for its performance verses its potential adverse side effects.</p>

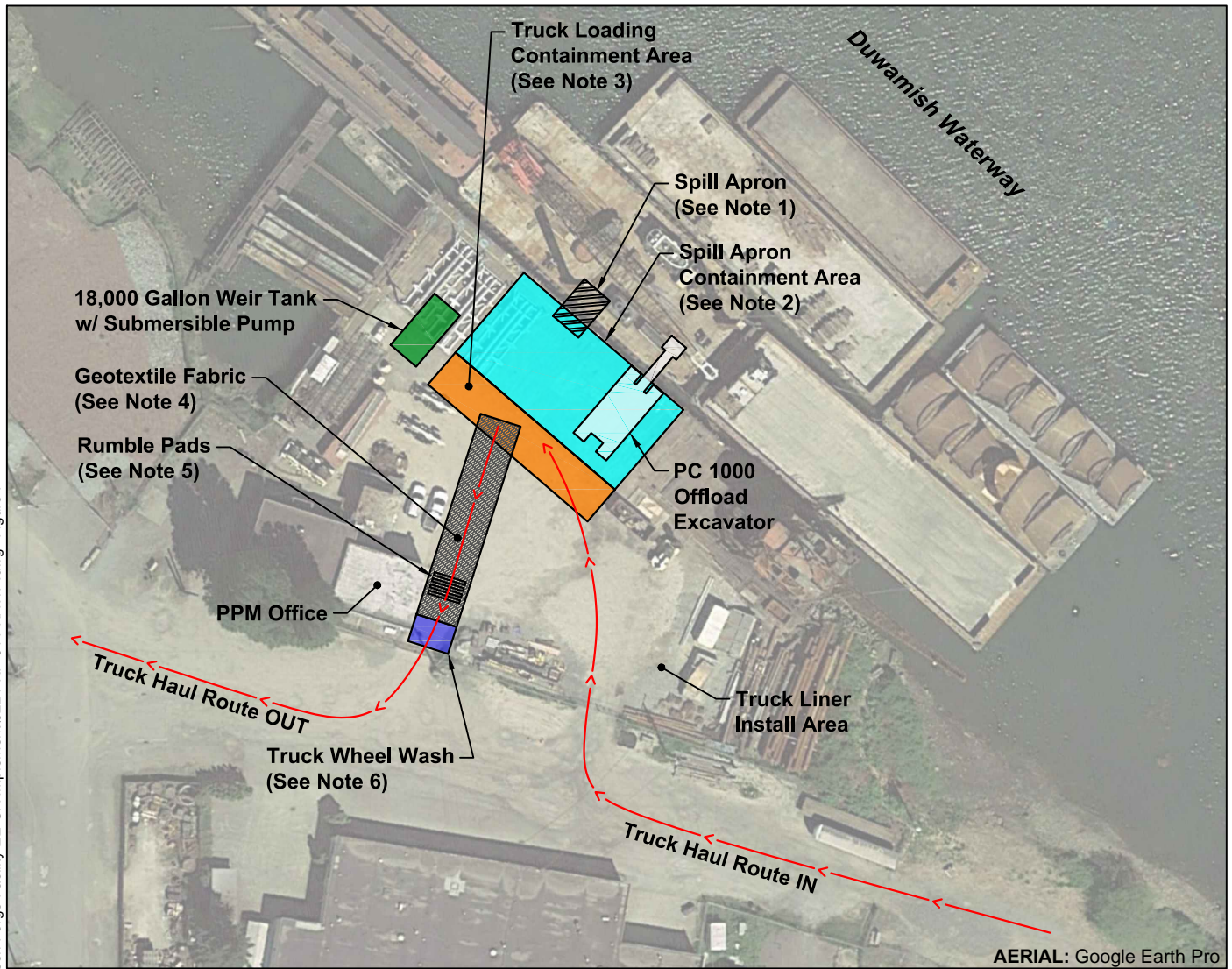
Activity	Risk	BMP
<p>Stormwater Management</p>	<ol style="list-style-type: none"> 1. Dredge materials impacting on-site Storm Water system 2. Discharge of dredge material impacted storm water to the river 	<p>The dredge material handling work area is contained and isolated from the PPM facility.</p> <p>Any storm water collected on the 20 mil poly sheeting within the dredge material handling area will be diverted to a sump area, collected, treated and discharged to the POTW in accordance with the permit issued by King County or collected, transported, and disposed at an appropriately permitted facility. No storm water from the dredge material handling area, or any water removed from the containment area, will be discharged back into the river.</p>

9.0 Figures

9.1 Figure 1: Vicinity Map



9.2 Figure 2: TTD Facility



NOTES:

1. Spill Apron is constructed of steel and is 16'w x23' long with 12" high sides. The apron is angled to the barge and containment area to capture any fallen pieces of material from the excavator bucket during transfer from the barge.
2. Spill Apron Containment Area will be 50'x100' long. It will be constructed with a one-high ecology block wall around all four sides. A 20mil PVC liner will cover the entire containment area and will be draped and fastened over the wall. A layer of crushed rock will be placed over the PVC liner to protect it from wear and tear. Steel road plates will be placed on top of the crushed rock to facilitate cleaning operations.
3. Truck Loading Containment Area will be 20'x100'. It will be constructed of a 6" gravel berm around all four sides. A 20mil PVC liner will be placed over the gravel berm. Crushed rock will be placed over the liner to protect it from truck traffic. Steel road plates will be placed on top of the crushed rock to facilitate truck movements and cleaning operations.
4. A 20'x100' section of geotextile fabric will be placed down to remove any fine sediments from truck wheels. The fabric will be placed daily or as needed to ensure the fabric is functioning properly.
5. Two sets of steel rumble pads will be utilized to remove any sediment from truck wheels before the trucks proceed onto the geotextile fabric.
6. An above ground temporary wheel wash system will be installed at the exit of facility for a final wheel cleaning.

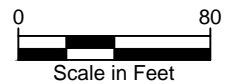
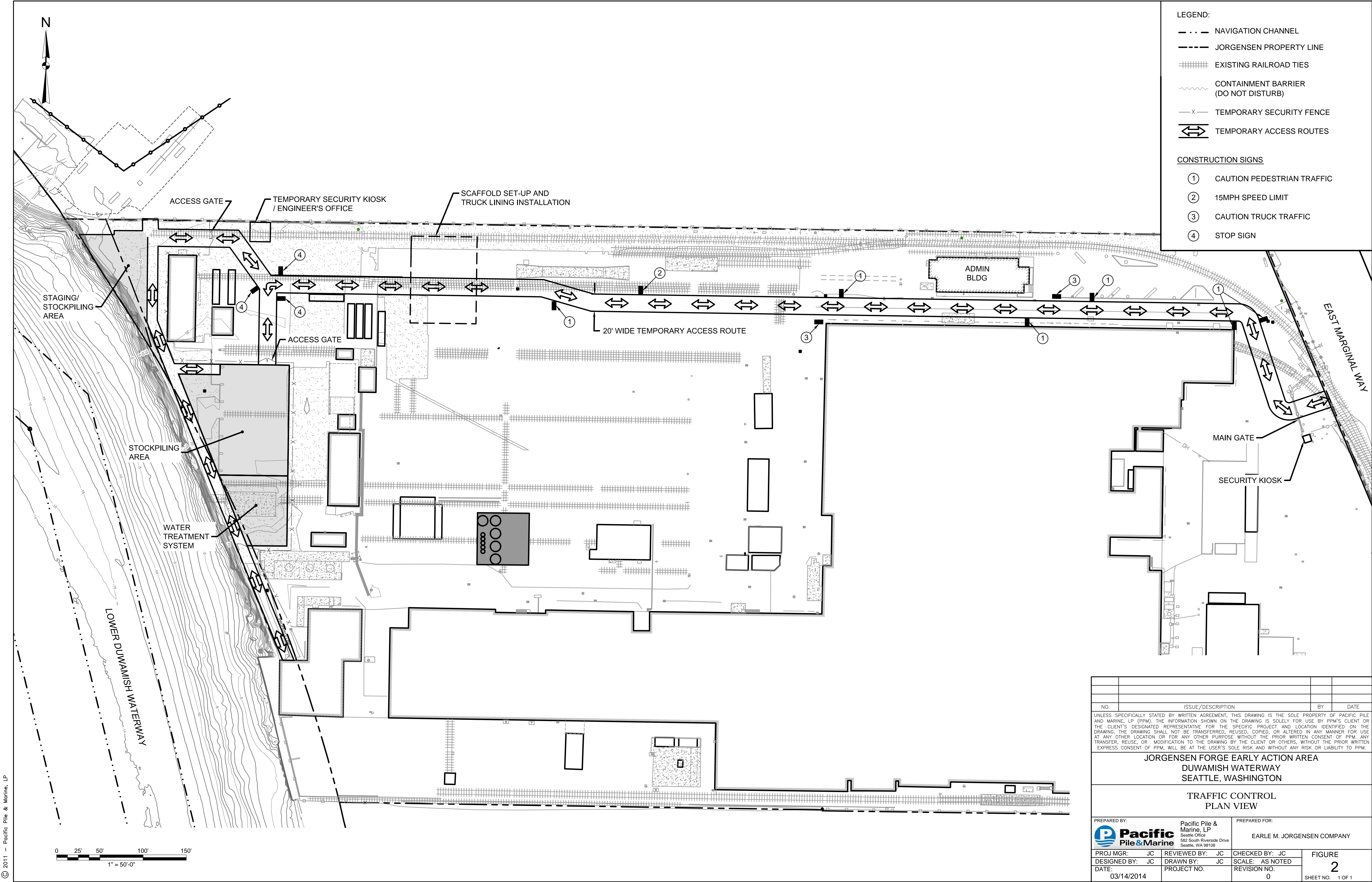


Figure 7
 Pacific Pile & Marine TTD Facility Plan
 Removal Action Work Plan
 Jorgensen Forge Early Action Area

9.3 Figure 3: Barge Offload Excavator

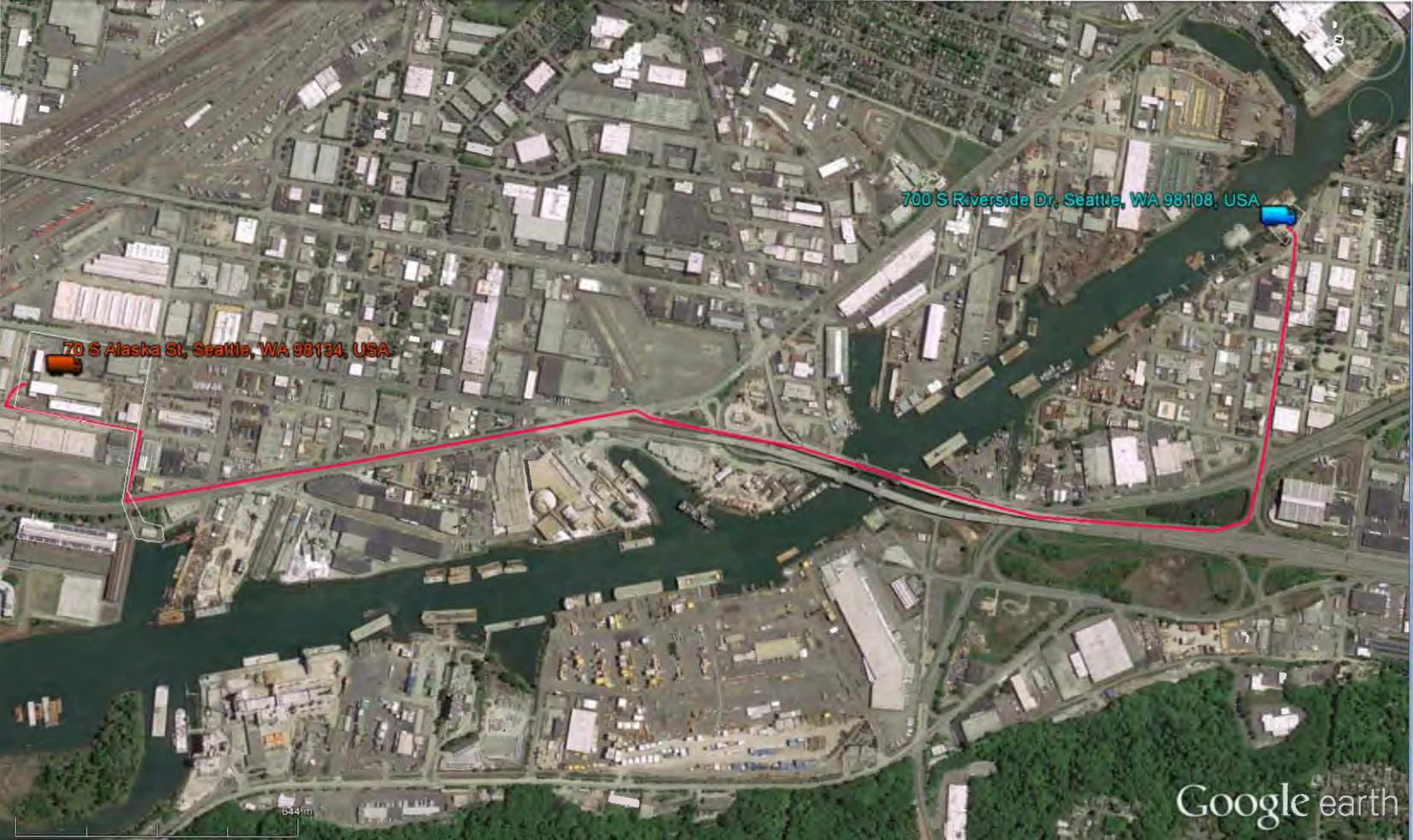
9.4 Figure 4: Site Plan





NO.	ISSUE/DESCRIPTION			BY DATE
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF PACIFIC PILE AND MARINE, LP (PPM). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY PPM'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF PPM. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF PPM, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO PPM.				
JORGENSEN FORGE EARLY ACTION AREA DUWAMISH WATERWAY SEATTLE, WASHINGTON				
TRAFFIC CONTROL PLAN VIEW				
PREPARED BY:		Pacific Pile & Marine, LP Seattle Office 582 South Riverside Drive Seattle, WA 98108		PREPARED FOR: EARLE M. JORGENSEN COMPANY
PROJ MGR: JC		REVIEWED BY: JC		CHECKED BY: JC
DESIGNED BY: JC		DRAWN BY: JC		SCALE: AS NOTED
DATE: 03/14/2014		PROJECT NO.		REVISION NO. 0
				FIGURE 2
				SHEET NO. 1 OF 1

9.5 Figure 5: Truck Route Site to ASTS



700 S Riverside Dr, Seattle, WA 98108, USA

70 S Alaska St, Seattle, WA 98134, USA

70 S Alaska St, Seattle, WA 98134, USA

700 S Riverside Dr, Seattle, WA 98108, USA

8531 East Marginal Way S, Tukwila, WA 98108, USA

9.6 Animation of Boeing Dredge, Transload, Transportation Process



10.0 Permits

10.1 Attachment A: King Co. Solid Waste Facility Permit

Environmental Health Services Division

401 Fifth Avenue, Suite 1100
Seattle, WA 98104-1818

206-205-4394 Fax 206-296-0189

TTY Relay: 711

www.kingcounty.gov/health

Public Health
Seattle & King County



Solid Waste Facility Permit # PR0049443

Effective: January 1, 2013

Expires: December 31, 2013

Permit type: Storage/Treatment Piles Facility

Name of Facility: **Alaska Reload & Recycling**

Facility Location: 70 S. Alaska St., Seattle, WA, 98134

Mailing address: 8111 – 1st Ave S, Seattle, WA 98108

Facility Owner: Waste Management DBA Alaska Reload & Recycling

Facility Operator: Waste Management

John Borghese

Phone: 206-763-5025

E-mail: jborghes@wm.com

SUBJECT TO ALL STATE LAWS, COUNTY BOARD OF HEALTH RULES AND REGULATIONS, AND/OR CITY OR COUNTY ORDINANCES PERTAINING THERETO. THIS PERMIT MAY BE SUSPENDED OR REVOKED UPON VIOLATION BY THE HOLDER OF ANY OF THE TERMS OF THESE REGULATIONS. THIS PERMIT IS NOT TRANSFERABLE AND MUST BE POSTED IN A CONSPICUOUS PLACE. THIS PERMIT IS NOT VALID UNLESS SIGNED BY OPERATOR. NEW OPERATORS MUST APPLY AND PAY FOR A NEW PERMIT BEFORE BEGINNING OPERATION.

This facility shall operate in accordance with the approved plan of operation. Deviations from or changes to the plan must be submitted in writing and approved by Seattle-King County Department of Public Health (SKCDPH) prior to implementation. Further conditions of this permit are contained on the following pages.

SEATTLE-KING COUNTY DEPARTMENT OF PUBLIC HEALTH

David Fleming, MD Director and Health Officer

By: _____

Bill Lasby
Bill Lasby, Supervisor

Solid Waste, Rodent, and Zoonotics Program

X _____

Operator Signature

Date of issuance: March 19, 2013

Section 1. General Permit Conditions

A. The holder of this permit shall comply with the Code of the King County Board of Health Title 10 (Title 10) and WAC 173-350-320 for Piles Used for Storage or Treatment facilities as well as all applicable local, state and federal regulations. Where any conflicts between any regulations exist, the more stringent shall apply. It is the responsibility of the permittee to remain informed of these regulations.

B. All conditions of this permit shall be binding in order for the permit to remain valid. The permittee shall bear responsibility for the actions and omissions of all facility agents and contractors. This condition shall remain in effect for the life of the facility, including closure activities.

C. The permittee shall allow authorized representatives of the SKCDPH or the Department of Ecology (Ecology) to inspect the facility, equipment and records at any reasonable time, regardless of prior knowledge of the inspection.

D. The permittee shall notify the SKCDPH Solid Waste Program office at **206-263-9566** immediately of any spills, releases, contaminations, or threats to human health or the environment, while taking all necessary measures to protect the same.

E. SKCDPH may suspend or revoke this permit if the permittee:

- fails to adhere to the terms of this permit and the approved plan of operation,
- fails to meet all applicable regulations, or
- fails to provide all information that could be deemed pertinent to the issuance of the permit in an accurate, complete form.

Section 2. Specific Permit Conditions

A. The permittee is authorized to operate a Storage/Treatment Pile facility following the plan of operation for this facility dated **February 1997**. Only activities detailed in the facility plan of operation are approved. The plan of operation is to be posted in the workplace where personnel can readily refer to it and shall be provided upon request to SKCDPH. It is the permittee's responsibility to inform all agents and contractors of the conditions of the plan of operations, and to ensure that they comply with the conditions of this permit and Title 10 when using this facility.

Note: A new plan of operation for this facility was received June 15, 2010, and is still under review by Public Health and Ecology, and comments on this plan will be sent to Waste Management upon completion of the review.

2013 Solid Waste Handling Permit # PR0049443

B. The facility is restricted to accepting bulk and containerized clean soils, bulk and containerized nonhazardous contaminated soils, bulk and containerized nonhazardous industrial sludge, auto fluff, materials that have been approved for use as alternate daily cover or other beneficial uses at Subtitle D landfills, bulk and containerized recyclables: organic and compostables (e.g. yard debris that may contain food waste, clean wood, and cardboard), and other materials that have been approved following appropriate regulatory review and waste clearance for use as alternate daily cover, beneficial uses, or disposal at the landfill.

NOTE: Public Health reserves the right to withdraw the acceptance of bulk and containerized recyclables: organic and compostables if environmental controls are not met.

This facility may also operate as a 10-day hazardous waste transfer facility regulated by Ecology, (this activity is not covered by this permit).

Section 3. Minimum Performance Standards

A. Per WAC 173-350-040, the permittee and all agents or contractors shall:

1. Design, construct, operate, and close the facility in a manner that does not pose a threat to human health or the environment;
2. Comply with chapter 90.48 RCW, Water Pollution Control and implementing regulations, including chapter 173-200 WAC, Water Quality Standards for Ground Waters of the State of Washington;
3. Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid Waste Management-Reduction and Recycling; and
4. Not cause any violation of emission standards or ambient air quality standards at the property boundary of the facility and comply with chapter 70.94 RCW, Washington Clean Air Act.
5. Comply with all other applicable local, state and federal laws and regulations.

B. The permittee and all agents or contractors shall meet the operating standards of WAC 173-350-320(4):

a) Operate the facility to:

- (i) Control fugitive dust;
- (ii) Control access to the pile;
- (iii) Ensure that non-permitted waste is not accepted at the facility;
- (iv) Control vector harborage and implement vector control as necessary;
- (v) Ensure that waste piles capable of attracting birds do not pose an aircraft safety hazard; and
- (vi) For piles of putrescible waste and contaminated soils or dredged material, control nuisance odors.

Section 4. Monitoring Requirements

Under the operating standards of WAC 173-350-320(4), Alaska Street Reload and all agents or contractors shall:

(a) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may cause or lead to the release of wastes to the environment or a threat to human health. Inspections shall include the engineered surface on which the piles are placed, and the leachate and stormwater control systems. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by SKCDPH as part of the permitting process;

(b) Maintain daily operating records on the weights and the types of waste received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(c) Prepare and submit a copy of an annual report to the SKCDPH and Ecology by April 1st on forms supplied by Ecology. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

- (i) Name and address of the facility;
- (ii) Calendar year covered by the report;
- (iii) Annual quantity and type of solid waste handled by the facility, including amounts received, amounts removed and the amount of waste remaining at the facility at year's end, in tons.

Section 5. Compliance Schedule

Due Date	Requirement
Weekly	Conduct weekly facility inspections and maintain inspection reports to be made available for Public Health review under WAC 173-350-320(4)(b).
April 1, 2013	Submit annual report detailing the facility's activities for 2012 under WAC 173-350-320(4)(d).



Columbia Ridge Landfill

Jorgensen Forge Draft TTD Work Plan 39 September 2013



State of Oregon
Department of
Environmental
Quality

**SOLID WASTE DISPOSAL SITE PERMIT:
Municipal Solid Waste Landfill
Addendum No. 3: Columbia Ridge Landfill**

**Oregon Department of Environmental Quality
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255**

Issued in accordance with the provisions of ORS Chapter 459

ISSUED TO:

Waste Management Disposal Services of Oregon
Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812

FACILITY NAME AND LOCATION:

Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon
T2N, R21E, S32/33 WM.

OWNER:

Waste Management Disposal Services of Oregon,
Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812

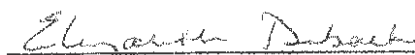
OPERATOR:

Waste Management Disposal Services of Oregon,
Inc.

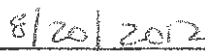
ISSUED IN RESPONSE TO:

- ® Request for an Addendum to Renew Permit Condition 6.3, dated March 22, 2012.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY



Elizabeth Druback
Solid and Hazardous Waste Programs Manager
Eastern Region



Date

ADDENDUM NO. 3

In accordance with Oregon Administrative Rules 340-93-0070(7)(a) and 340-93-0113, Solid Waste Permit No. 391 is hereby amended as follows:

6.3 Liquid waste disposal

- The Permittee is not allowed to accept liquid waste for disposal except in a Department approved surface impoundment or as authorized in the August 2003 *RD&D Permit Application and Operation Plan* (RD&D application), revised RD&D application dated August 25, 2003 and in accordance with any revisions and modifications to the RD&D application approved by the Department. Approved liquid waste disposal is limited to liquid wastes for which it has been determined that they support the microbiological processes acting to decompose landfilled waste. Such determination must be made for each liquid waste stream in accordance with acceptance criteria contained in a Department-approved Special Waste Management Plan.

Definition: Liquid wastes are wastes that do not pass the paint filter test performed in accordance with EPA method 9095.

- The primary goal of this RD&D program is to use liquid disposal to enhance waste decomposition and landfill gas production in a manner that when compared to existing "dry" landfill operations will provide an environmental benefit(s) without increased risk to human health or the environment. To achieve this goal, based on RD&D application proposals, the Permittee must both control the increased gas emissions caused by liquids disposal, and recover energy from landfill gas when feasible.
- Disposal of liquids must be conducted in a manner that will optimize landfill gas production for energy recovery. Operations must emphasize effective introduction of liquids into the waste mass in a manner approved by the Department.
- Increased gas emissions related to liquids disposal must be controlled without increasing emissions into the environment (compared to existing "dry" landfill operations) in a manner approved by the Department.
- By no later than June 15 of each year, the Permittee shall submit an annual report. Included in the annual report, the Permittee shall show whether and to what extent progress is being made to attain project goals, and summarize all monitoring and testing requirements as well as operating information specified in the RD&D application.
- This RD&D permit condition will expire October 1, 2015. The Director may terminate this condition at any time the overall primary goals of the RD&D application are not being attained, including protection of human health and the environment.

Permit Addendum expiration date: October 1, 2015. This Addendum must be attached to and made part of Solid Waste Disposal Permit No. 391. The addendum is effective upon receipt.



State of Oregon
Department of
Environmental
Quality

Permit Number: 2
Permit Expiration Date: July 1, 2017
Addendum Expiration Date: October 1, 2012
Page 1 of 2

**SOLID WASTE DISPOSAL SITE PERMIT:
Municipal Solid Waste Landfill
Addendum: Columbia Ridge Landfill**

Oregon Department of Environmental Quality
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255

Issued in accordance with the provisions of ORS Chapter 459

ISSUED TO:

Waste Management Disposal Services of Oregon,
Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812

FACILITY NAME AND LOCATION:

Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812
T2N, R21E, S32/33 WM.

OWNER:

Waste Management Disposal Services of Oregon,
Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812

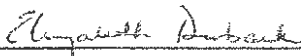
OPERATOR:

Waste Management Disposal Services of Oregon,
Inc.

ISSUED IN RESPONSE TO:

- Request for Renewal of Permit Condition 6.3 dated February 25, 2009.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY


Elizabeth Druback
Solid Waste Manager
Eastern Region

09/03/09
Date

ADDENDUM NO. 2

In accordance with Oregon Administrative Rules 340-93-0070(7)(a) and 340-93-0113, Solid Waste Permit No. 2 is hereby amended as follows:

6.3 Liquid waste disposal

- The Permittee is not allowed to accept liquid waste for disposal except in a Department approved surface impoundment or as authorized in the August 2003 RD&D Permit Application and Operation Plan (RD&D application), revised RD&D application dated August 25, 2003 and in accordance with any revisions and modifications to the RD&D application approved by the Department. Approved liquid waste disposal is limited to liquid wastes for which it has been determined that they support the microbiological processes acting to decompose landfilled waste. Such determination must be made for each liquid waste stream in accordance with acceptance criteria contained in a Department-approved Special Waste Management Plan.

Definition: Liquid wastes are wastes that do not pass the paint filter test performed in accordance with EPA method 9095.

- The primary goal of this RD&D program is to use liquid disposal to enhance waste decomposition and landfill gas production in a manner that when compared to existing "dry" landfill operations will provide an environmental benefit(s) without increased risk to human health or the environment. To achieve this goal, based on RD&D application proposals, the Permittee must both control the increased gas emissions caused by liquids disposal, and recover energy from landfill gas when feasible.
- Disposal of liquids must be conducted in a manner that will optimize landfill gas production for energy recovery. Operations must emphasize effective introduction of liquids into the waste mass in a manner approved by the Department.
- Increased gas emissions related to liquids disposal must be controlled without increasing emissions into the environment (compared to existing "dry" landfill operations) in a manner approved by the Department.
- By no later than June 15 of each year, the Permittee shall submit an annual report. Included in the annual report, the Permittee shall show whether and to what extent progress is being made to attain project goals, and summarize all monitoring and testing requirements as well as operating information specified in the RD&D application.
- **This RD&D permit condition will expire October 1, 2012.** The Director may terminate this condition at any time the overall primary goals of the RD&D application are not being attained, including protection of human health and the environment.

Permit expiration date: July 1, 2017. This Addendum must be attached to and made part of Solid Waste Disposal Permit No. 391. The addendum is effective upon receipt.



State of Oregon
Department of
Environmental
Quality

**SOLID WASTE DISPOSAL SITE PERMIT:
Municipal Solid Waste Landfill
Columbia Ridge Landfill
Addendum**

**Oregon Department of Environmental Quality
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255**

Issued in accordance with the provisions of ORS Chapter 459

ISSUED TO:

Waste Management Disposal Services of Oregon,
Inc.
Columbia Ridge Landfill
18177 Cedar Springs Lane
Arlington, OR 97812
(541) 454-3201

FACILITY NAME AND LOCATION:

Waste Management Disposal Services of Oregon,
Inc.
Columbia Ridge Landfill
18177 Cedar Springs Lane
Arlington, OR 97812
(541) 454-3201

OWNER:

Waste Management Disposal Services of Oregon,
Inc.

OPERATOR:

Waste Management Disposal Services of Oregon,
Inc.

ISSUED IN RESPONSE TO: A Department initiated administrative modification.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Elizabeth Druback

Elizabeth Druback
Solid Waste Manager
Eastern Region

5/26/09

Date

ADDENDUM NO. 1

In accordance with Oregon Revised Statute (ORS) 459A.300-.365 and Oregon Administrative Rules Chapter 340 Division 12, Permit No.391 is hereby amended as follows:

The following condition is added to section 6, Prohibitions

**6.11 Covered
electronic
devices**

After January 1, 2010, the permittee must not knowingly accept the following covered electronic devices for disposal:

- Computer monitors having a viewable area greater than four (4) inches diagonally;
- Televisions having a viewable area greater than four (4) inches diagonally;
- Desktop computers; or
- Portable computers.

ADDENDUM NO. 2

In accordance with Oregon Administrative Statute (ORS) 459A. 300-.365 and Oregon Administrative Rules Chapter 340 Division 12, Permit No.391 is hereby amended as follows:

The following condition is added to the Disposal Operations section of the table in section 7.3:

7.3 Plan content	<hr/> <ul style="list-style-type: none">• A Program for preventing acceptance of covered electronic devices for disposal. <hr/>
-------------------------	---

Permit expiration date: July 1, 2017. These Addendums must be attached to and made part of Solid Waste Disposal Permit No. 391. The addendums are effective upon receipt.



State of Oregon
Department of
Environmental
Quality

Permit Number: 391
Expiration Date: July 1, 2017
Page 1 of 37

**SOLID WASTE DISPOSAL SITE PERMIT:
Municipal Solid Waste Landfill
Columbia Ridge Landfill**

**Oregon Department of Environmental Quality
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255**

**Issued in accordance with the provisions of ORS Chapter 459 and
subject to the land use compatibility statement referenced below.**

ISSUED TO:

Waste Management Disposal Services of Oregon,
Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812
(541) 454-3201 Fax (541) 454 3247

FACILITY NAME AND LOCATION:

Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812
T2N, R21E, S32/33 WM.

OWNER:

Waste Management Disposal Services of Oregon,
Inc.
18177 Cedar Springs Lane
Arlington, Oregon 97812

OPERATOR:

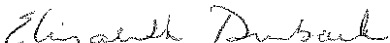
Waste Management Disposal Services of Oregon,
Inc.

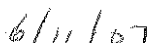
ISSUED IN RESPONSE TO:

- A solid waste permit application received November 29, 2006; and
- A Land Use Compatibility Statement from Gilliam County dated December 7, 2006.

The determination to issue this permit is based on findings and technical information included in the permit record.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY


Elizabeth Druback
Solid Waste Manager
Eastern Region


Date

Permitted Activities

Until such time as this permit expires or is modified or revoked, the permittee is authorized to establish, operate, and maintain a solid waste land disposal site in conformance with the requirements, limitations, and conditions set forth in this document including all attachments.

TABLE OF CONTENTS

Introduction This document is a solid waste permit issued by the Oregon Department of Environmental Quality in accordance with Oregon Revised Statutes (ORS) 459 and Oregon Administrative Rules (OAR), Chapter 340.

In this document This document contains the following sections:

Section	Topic	See Page
----	Permit Administration	3
1.0	Issuance	3
2.0	Disclaimers	4
3.0	Authority	4
4.0	Permit Modification	5
----	Allowable Activities	6
5.0	Authorizations	6
6.0	Prohibitions	7
----	Operations and Design	10
7.0	Operations Plan	10
8.0	Recordkeeping and Reporting - Operations	12
9.0	Specific Operating Conditions	14
10.0	Site Development and Design	17
11.0	Recycling Requirements	20
----	Site Closure	21
12.0	Closure Construction and Maintenance	21
13.0	Financial Assurance	22
----	Environmental Monitoring	24
14.0	Environmental Monitoring Plan (EMP)	24
15.0	Environmental Sampling Requirements	25
16.0	Establishing Permit Specific Concentration Limits	27
17.0	Environmental Monitoring Standards	28
18.0	Recordkeeping and Reporting – Environmental Monitoring	31
19.0	Environmental Monitoring Network	33
----	Compliance Schedule	35
20.0	Summary of Due Dates	35
----	Attachments	35
21.0	Attachments to Permit	36

PERMIT ADMINISTRATION

1.0 ISSUANCE

1.1	In this section	This section describes the parameters surrounding permit issuance, including the following information: <ul style="list-style-type: none">• Permittee;• Permit number;• Permit term;• Facility type;• Facility owner/operator;• Basis for issuance and• Definitions.	
1.2	Permittee	This permit is issued to Waste Management Disposal Services of Oregon, Inc.	
1.3	Permit number	This permit will be referred to as Solid Waste Permit Number 391 .	
1.4	Permit term	The issue date of this permit is the date this document is signed. The expiration date of this permit is July 1, 2017 .	
1.5	Facility type	The facility is permitted as a municipal solid waste landfill.	
1.6	Facility owner/operator	The owner of this facility is: Waste Management Disposal Services of Oregon, Inc. Arlington, Oregon 97812	The operator of this facility is: Waste Management Disposal Services of Oregon, Inc.
1.7	Basis for issuance	This permit is issued based upon the following documents submitted by the permittee: <ul style="list-style-type: none">• Solid waste permit application received November 29, 2006; and• Land Use Compatibility Statements from Gilliam County dated December 7, 2006.	
1.8	Definitions	Unless otherwise specified, all terms are as defined in OAR 340-93-030.	

2.0 DISCLAIMERS

2.1	In this section	<p>This section describes disclaimer information for the Department, including:</p> <ul style="list-style-type: none">• Property rights; and• Department liability.
2.2	Property rights	<p>The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights.</p>
2.3	Department liability	<p>The Department, its officers, agents, or employees do not sustain any liability on account of the issuance of this permit or on account of the construction, maintenance, or operation of facilities pursuant to this permit.</p>

3.0 AUTHORITY

3.1	In this section	<p>This section describes the authority of the Oregon Department of Environmental Quality to issue this permit, including the following information:</p> <ul style="list-style-type: none">• 10 year permit;• Documents superseded;• Binding nature;• Other compliance; and• Penalties.
3.2	Ten year permit	<p>This permit is issued for a maximum of ten years as authorized by Oregon Revised Statutes 459.245 (2).</p>
3.3	Documents superseded	<p>This document is the primary solid waste permit for the facility, superseding all other solid waste permits issued for Columbia Ridge Landfill and Recycling Center by the Department.</p>
3.4	Binding nature	<p>Conditions of this permit are binding upon the permittee. The permittee is liable for all acts and omissions of the permittee's contractors and agents.</p>
3.5	Other compliance	<p>Issuance of this permit does not relieve the Permittee from the responsibility to comply with all other applicable federal, state, or local laws or regulations. This includes the following solid waste requirements, as well as all updates or additions to these requirements:</p> <ul style="list-style-type: none">• Solid waste permit application received November 29, 2006;• Oregon Revised Statutes, Chapters 459 and 459A;• Oregon Administrative Rules Chapter 340; and• Any documents submitted by the Permittee and approved by the Department.
3.6	Penalties	<p>Violation of permit conditions will subject the permittee to civil penalties of up to \$10,000 for each day of each violation.</p>

4.0 PERMIT MODIFICATION

4.1	In this section	<p>This section describes information about modification of this permit, including:</p> <ul style="list-style-type: none">• 5 year review;• Modification;• Modification and revocation by Department;• Modification by permittee;• Public participation; and• Changes in ownership.
4.2	Five year review	<p>Between the 4th and 6th year of the life of the permit, the Department may review the permit and determine whether or not the permit should be amended.</p> <p>While not an exclusive list, the following factors will be used in making that determination:</p> <ul style="list-style-type: none">• Compliance history of the facility;• Changes in volume, waste composition, or operations at the facility;• Changes in state or federal rules which should be incorporated into the permit;• A significant release of leachate or landfill gas to the environment from the facility; and• Significant changes to a Department-approved site development plan, and/or conceptual design.
4.3	Modification	<p>At any time in the life of the permit, the Department or the Permittee may propose changes to the permit.</p>
4.4	Modification and revocation by Department	<p>The Director may, at any time before the expiration date, modify, suspend, or revoke this permit in whole or in part, in accordance with Oregon Revised Statutes 459.255, for reasons including but not limited to the following:</p> <ul style="list-style-type: none">• Violation of any terms or conditions of this permit or any applicable statute, rule, standard, or order of the Commission;• Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or• A significant change in the quantity or character of solid waste received or in the operation of the disposal site.
4.5	Modification by permittee	<p>The Permittee must apply for a modification to this permit if there is a significant change in facility operations or a deviation from activities described in this document.</p>
4.6	Public participation	<p>Significant changes in the permit will be made public by the issuance of a public notice as required by Department rules.</p>
4.7	Changes in ownership	<p>The Permittee must report to the Department any changes in either ownership of the disposal site property or of the name and address of the Permittee or operator within ten (10) days of the change.</p>

ALLOWABLE ACTIVITIES

5.0 AUTHORIZATIONS

5.1	In this section	<p>This section describes the activities the Permittee is authorized to conduct, including:</p> <ul style="list-style-type: none">• Waste Authorized for receipt;• Authorization of other wastes;• Authorization of activities;• Tires for recycling; and• Salvaging and recycling.
5.2	Wastes authorized for receipt	<ul style="list-style-type: none">• This permit authorizes the facility to accept solid waste as defined in ORS 459.005, except non-digested sewage sludges and septic tank pumpings and free liquids other than those allowed in Condition 6.3.
5.3	Authorization of other wastes	<p>Wastes excluded from the above authorization may be authorized for acceptance if:</p> <ul style="list-style-type: none">• The Permittee develops a Special Waste Management Plan and submits it to the Department for approval;• The Department approves the Special Waste Management Plan; and• The Permittee can demonstrate that the materials do not constitute hazardous waste, as defined by state and federal regulations.
5.4	Authorization of activities	<p>All facility activities are to be conducted in accordance with the provisions of this permit. All plans required by this permit become part of the permit by reference once approved by the Department. Any conditions of the approval are also incorporated into this permit unless contested by the Permittee within 30 days of the receipt of a conditional approval.</p>
5.5	Tires for recycling	<p>This permit authorizes the facility to accept up to 100 whole tires for storage and removal.</p> <p>This permit authorizes the facility to accept up to 2,000 whole tires for storage and removal if the Permittee maintains a continuous contract with a waste tire carrier to remove the tires from the site.</p>
5.6	Salvaging and recycling	<p>Salvaging and recycling are authorized if conducted in a controlled and orderly manner.</p>

6.0 PROHIBITIONS

6.1	In this section	<p>This section describes specific activities the Permittee is prohibited from conducting, including:</p> <ul style="list-style-type: none">• Hazardous waste disposal;• Liquid waste disposal;• Vehicle disposal;• Used oil disposal;• Battery disposal;• Tire disposal;• Recyclable material disposal;• Open burning; and• Large appliances.
6.2	Hazardous waste disposal	<p>The Permittee must not accept any regulated hazardous wastes. <u>Reference:</u> 40 CFR 258.20 (b).</p> <p>In the event discovered wastes are hazardous or suspected to be hazardous, the Permittee must, within 7 days, notify the Department and initiate procedures to identify and remove the waste. Hazardous wastes must be removed within 90 days, unless otherwise approved by the Department. Temporary storage and transportation must be carried out in accordance with the rules of the Department.</p>

6.3 Liquid waste disposal

- The Permittee is not allowed to accept liquid waste for disposal except in a Department approved surface impoundment or as authorized in the August 2003 *RD&D Permit Application and Operation Plan* (RD&D application), revised RD&D application dated August 25, 2003 and in accordance with any revisions and modifications to the RD&D application approved by the Department. Approved liquid waste disposal is limited to liquid wastes for which it has been determined that they support the microbiological processes acting to decompose landfilled waste. Such determination must be made for each liquid waste stream in accordance with acceptance criteria contained in a Department-approved Special Waste Management Plan.

Definition: Liquid wastes are wastes that do not pass the paint filter test performed in accordance with EPA method 9095.

- The primary goal of this RD&D program is to use liquid disposal to enhance waste decomposition and landfill gas production in a manner that when compared to existing "dry" landfill operations will provide an environmental benefit(s) without increased risk to human health or the environment. To achieve this goal, based on RD&D application proposals, the Permittee must both control the increased gas emissions caused by liquids disposal, and recover energy from landfill gas when feasible.
- Disposal of liquids must be conducted in a manner that will optimize landfill gas production for energy recovery. Operations must emphasize effective introduction of liquids into the waste mass in a manner approved by the Department.
- Increased gas emissions related to liquids disposal must be controlled without increasing emissions into the environment (compared to existing "dry" landfill operations) in a manner approved by the Department.
- By no later than June 15 of each year, the Permittee shall submit an annual report. Included in the annual report, the Permittee shall show whether and to what extent progress is being made to attain project goals, and summarize all monitoring and testing requirements as well as operating information specified in the RD&D application.
- This RD&D permit condition will expire October 1, 2009. The Director may terminate this condition at any time the overall primary goals of the RD&D application are not being attained, including protection of human health and the environment.

6.4 Vehicle disposal

The Permittee must not accept discarded or abandoned vehicles for disposal.

6.5 Used oil disposal

The Permittee must not accept used oil for disposal.

6.6 Battery disposal

The Permittee must not accept lead-acid batteries for disposal.

6.7 Tire disposal

The Permittee must not accept waste tires for disposal.

6.8	Recyclable material disposal	<p>The Permittee must not landfill or dispose of any source separated recyclable material brought to the disposal site.</p> <p><u>Exception:</u> If the source separated material is determined to be in a condition which makes the material unusable or not recyclable then it may be landfilled. This determination must be made after consultation with the Department.</p>
6.9	Open burning	<p>The Permittee must not conduct any open burning at the site with the exception of the controlled burning of weeds. The Department's Pendleton office must be notified prior to each burning event. An attendant must be on duty during each burning event.</p>
6.10	Large Appliances	<p>The Permittee must not knowingly accept for disposal large metal jacketed residential, commercial, and industrial appliances such as refrigerators, washers, stoves and water heaters.</p>

OPERATIONS AND DESIGN

7.0 OPERATIONS PLAN

- 7.1 In this section** This section describes the requirements associated with a facility Operations Plan, including:
- Operations plan;
 - Plan content;
 - Operations and maintenance manual;
 - Plan and manual maintenance;
 - Plan and manual compliance; and
 - Submittal address.
-
- 7.2 Operations Plan** Within 5 years of the permit issue date, the Permittee must review and submit any necessary updates to the site Operations Plan to the Department for approval. Upon approval, this plan is incorporated into this permit by reference.
-
- 7.3 Plan content** The Operations Plan must describe the operation of the disposal site in accordance with all regulatory and permit requirements, including the following:

Content area	Describe plans for:
General operations	<ul style="list-style-type: none"> • Handling and removal of unauthorized wastes discovered at the facility; • Management of landfill gas; • Management of landfill leachate; • Surface water and erosion control structure design; and • Non-compliance response.
Disposal operations	<ul style="list-style-type: none"> • Placement of daily and intermediate cover; • Detecting and preventing the disposal of regulated hazardous wastes, polychlorinated biphenyl wastes, and any other unacceptable wastes as determined by the Department; • Disposal of putrescible wastes; • Disposal of cleanup materials contaminated with hazardous substances; and • Fill progression and phasing.
Special Waste Management Plan	<ul style="list-style-type: none"> • Identifying and characterizing wastes which required special management or waste streams not otherwise authorized by the permit; • Identifying the source of all special wastes; • Determining appropriate handling procedures; and • Documenting plan implementation, including waste characterization. <p>References: OAR 340-93-190, OAR 340-94-040[11][b][J]</p>
Ancillary operations	<ul style="list-style-type: none"> • Handling and removal of waste fires; and • Management of transfer containers.

Inspection and maintenance	<ul style="list-style-type: none"> • Washing equipment; • Maintaining leachate and gas collection systems; and • Maintaining surface water control structures.
Operating record	<ul style="list-style-type: none"> • Operating record location.
Contingency	<ul style="list-style-type: none"> • Providing fire protection equipment; and • Notification of emergencies and fires to the Department.

Reference: OAR 340-94-040 describes requirements for preparation of an Operations Plan.

7.4	Operations and Maintenance Manual	Within 90 days of approval of the updated Operations Plan, the Permittee must prepare an updated Operations and Maintenance Manual which describes specific procedures for conducting routine and emergency operations at the site. A copy of the Operations and Maintenance Manual must be maintained in the Operating Record location and be available for Department review.
7.5	Plan and Manual maintenance	<p>The Permittee must revise both the Operations Plan and the Operations and Maintenance Manual as necessary to keep them current and reflective of current facility conditions and procedures.</p> <p>The Permittee must submit Operations Plan revisions to the Department for approval.</p>
7.6	Plan and Manual compliance	The Permittee must conduct all operations at the facility in accordance with the approved Operations Plan, including any amendments, and the Operations and Maintenance Manual.
7.7	Submittal address	<p>All submittals to the Department under this section must be sent to:</p> <p style="text-align: center;">Oregon Department of Environmental Quality Manager, Solid Waste Program 400 E Scenic Drive, Suite 307 The Dalles, OR 97058 Telephone: (541) 298-7255</p>

8.0 RECORDKEEPING AND REPORTING - OPERATIONS

- 8.1 In this section** This section describes recordkeeping and reporting operational information for the facility, including:
- Non-compliance reporting;
 - Permit display;
 - Access to records;
 - Procedure; and
 - Submittal address.

- 8.2 Non-compliance reporting** In the event that any condition of this permit or of the Department's rules is violated, the Permittee must immediately take action to correct the unauthorized condition and immediately notify the Department at:

(541) 276-4063

Response: In response to such a notification, the Department may conduct an investigation to evaluate the nature and extent of the problem, and to evaluate plans for additional corrective actions, as necessary.

- 8.3 Permit display** The Permittee must display this permit, or a photocopy thereof, where it can be readily referred to by operating personnel.
- 8.4 Access to records** Upon request, the Permittee must make all records and reports related to the permitted facility available to the Department.
- 8.5 Procedure** The Permittee must keep records and submit reports according to the following:

Step	Action
1	Establish a location for the Operating Record at the facility or another location mutually agreed with the Department.
2	Place information required by 40 CFR 258.29 in the Operating Record.
3	Collect information during facility operations on the amount of each type of solid waste received, recording "0" if the waste is not received. At a minimum, the following types of waste must be separately identified, and be categorized as being either in- or out-of-state wastes: <ul style="list-style-type: none">• Municipal solid waste;• Industrial solid waste;• Petroleum-contaminated soil; and• Approved alternative daily cover.
4	Collect information about the amount of each material recovered for recycling or other beneficial purpose each quarter

5	Collect the following operations information: <ul style="list-style-type: none">• Amount of solid waste received and by source each month;• Number of containers received each month;• Number of waste tires shipped annually;• Type and tonnage of special waste received by source each quarter; and• Source, type and tonnage of Clean-up material contaminated with hazardous substances each quarter.
6	Submit the information collected in Step 3 above on the Solid Waste Disposal Report/Fee Calculation form provided by the Department. Pay solid waste fees as required by OAR 340-97. <u>Date due:</u> the last day of the month following the end of the calendar quarter.
7	Submit the information collected in Step 4 above, on a form provided or approved by the Department, to the wasteshed representative. <u>Date due:</u> January 25 th of each year.
8	Submit the information collected in Step 5 above, on a form approved by the Department, to the regional solid waste program. <u>Date due:</u> the last day of the month following the end of the calendar quarter.
9	Retain copies of all records and reports for five years from the date created.
10	Update all records such that they reflect current conditions at the facility.

**8.6 Submittal
address**

The submittals required in steps 6 and 7 must be sent to:

Oregon Department of Environmental Quality
Land Quality Division
Solid Waste Program
811 S.W. Sixth Ave.
Portland, OR 97204
(503)229-5913

The submittal required in step 8 must be sent to:

Oregon Department of Environmental Quality
Manager, Solid Waste Program
400 E. Scenic Dr. Suite 307
The Dalles, OR 97058
(541) 298-7255

9.0 SPECIFIC OPERATING CONDITIONS

9.1	In this section	<p>This section describes specific conditions to which site operations must conform, including:</p> <ul style="list-style-type: none">• Discovery of prohibited waste;• Daily cover;• Interim cover;• Surface water structures;• Asbestos waste management;• Leachate management system;• Leachate surface impoundment;• Spills notification;• Litter control;• Vector control;• On-site roads;• Landfill gas management;• Public Transfer containers; and• Intermodal transfer containers.
9.2	Discovery of prohibited waste	<p>In the event that the Permittee discovers prohibited waste, the Permittee must, within 7 days, notify the Department and initiate procedures to isolate or remove the waste. Non-putrescible, non-hazardous prohibited waste must be transported to a disposal or recycling facility authorized to accept such waste within 90 days, unless otherwise approved or restricted by the Department. Storage of non-putrescible, non-hazardous, prohibited wastes must be approved by the Department in writing.</p>
9.3	Daily cover	<p>At a minimum, all solid wastes must be covered with a layer of six inches of compacted soil or an approved alternative daily cover of equivalent performance at the end of each working day.</p>
9.4	Interim cover	<p>Interim cover must be constructed and maintained as specified in Department-approved design and operations plans. Interim cover must be constructed over fill areas which will not receive additional waste for an extended period of time (i.e., greater than 120 days), and interim cover that is to remain exposed for more than two years must be actively revegetated as approved by the Department.</p>
9.5	Surface water structures	<p>All stormwater drainage structures must be maintained in good functional condition. Any significant damage must be reported to the Department and repairs made as soon as possible.</p>
9.6	Asbestos waste management	<p>Off loading and disposal of friable asbestos-containing solid waste must be conducted as specified in the Department-approved Operations Plan, and Operations & Maintenance Manual, and in accordance with OAR 340-032. (What about non-friable?)</p>

9.7	Leachate management system	The Permittee must construct, operate and maintain in good functional condition all leachate containment, collection, detection, removal, storage and treatment systems approved by the Department. Leachate must be continuously removed from all landfill leachate collection systems, such that hydraulic head on the bottom liner is minimized and does not exceed one (1) foot.
9.8	Leachate surface impoundment	Leachate must be prevented from escaping to local drainage ways and to other unlined areas of the site. Leachate surface impoundments must be maintained as non-overflow facilities with minimum of three (3) feet of dike freeboard above the leachate surface, unless otherwise approved by the Department. Fencing must control public access to the impoundments and all gates must be locked when an attendant is not on duty. Clearly legible and visible signs must be posted, stating the contents of the surface impoundments and "no trespassing".
9.9	Spills Notification	<p>Oregon Revised Statute 466.635 and Solid Waste Rules, Chapter 340, Division 142 require notification to OERS when oil or hazardous materials are spilled. The spill must be reported to the Oregon Emergency Response System at 1-800-452-0311 if the spill is of a reportable quantity. Reportable quantities include:</p> <ul style="list-style-type: none">• Any amount of oil spilled to waters of the state;• Oil spills on land in excess of 42 gallons;• 200 pounds (25 gallons) or more of spilled pesticide residue; and• Spills of hazardous materials that are equal to, or greater than, the quantity listed in the Code of Federal Regulations, 40 CFR Part 302 (List of Hazardous Substances and Reportable Quantities), and amendments adopted before July 1, 2002. <p>For a complete list of hazardous materials required to be reported, please refer to OAR 340-142-0050.</p>
9.10	Litter control	The Permittee must implement procedures which minimize the scattering of windblown litter and provide for effective and timely collection of litter to ensure the appearance of a well-maintained facility and prevent nuisance conditions.
9.11	Vector control	The Permittee must implement procedures that minimize insects, rodents, and birds at the active disposal area.
9.12	On-site roads	Roads from the landfill property line to the active disposal area and environmental monitoring locations must be constructed and maintained to minimize traffic hazards, dust and mud, and to provide reasonable all-weather vehicle access to active disposal units.
9.13	Landfill gas management	Landfill gas must be controlled in accordance with the requirements of 40 CFR Parts 51, 52 and 60. Landfill gas collection, containment, removal and treatment systems must be maintained in good functional condition.
9.14	Public transfer containers	Transfer containers for receipt of solid waste delivered by the public must be emptied on a frequency to prevent vectors, conditions for the transmission of disease, air pollution, odors, dust, and other objectionable conditions.

9.15

**Intermodal
transfer
containers**

Intermodal containers of regional solid waste must be emptied on a frequency to prevent vectors, conditions for the transmission of disease, air pollution, odors, dust, and other objectionable conditions.

10.0 SITE DEVELOPMENT AND DESIGN

10.1	In this section	<p>This section describes site development and design requirements for continued use of the landfill, or any landfill expansion or new facility construction, including:</p> <ul style="list-style-type: none">• Site Development Plan;• Baseline design criteria;• Design plans;• Construction requirements;• Construction documents;• Construction inspection;• Construction report submittal;• Construction report content;• Approval to use; and• Submittal address.
10.2	Site Development Plan	<p>Prior to May 31, 2015, the Permittee must review and submit any necessary updates to the long-term Site Development Plan to the Department for approval. Upon approval, this plan is incorporated into this permit by reference.</p> <p><u>Reference:</u> The <i>Solid Waste Landfill Guidance, September 1996</i>, provides information on applicable elements of a Site Development Plan. Following the organizational format provided in the Guidance will expedite Department review of the plan.</p>
10.3	Baseline design criteria	<p>Conceptual and detailed plans submitted for a new MSW landfill disposal unit pursuant to this permit must, at a minimum, provide for:</p> <ul style="list-style-type: none">• A composite liner system which includes an approved geomembrane liner (not less than 60 mils in thickness when using high density polyethylene, and not less than 30 mils of thickness for other types of approved geomembranes) and at least two feet of compacted soil having an in-place permeability no greater than 1×10^{-7} cm/sec, or an alternative liner approved by the Department pursuant to 40 CFR Part 258.40(a)(1);• A primary leachate collection and removal system (LCRS) which fully covers the liner system. As required by 40 CFR 258.40(a)(2), the primary LCRS must function to maintain less than a one (1) foot depth of leachate over the liner. All leachate collection pipes must be serviceable by clean out;• A secondary leachate collection and removal system(s) designed to effectively monitor the performance of the overlying composite liner system. The secondary leachate collection and removal system(s) must, at a minimum, be: (1) capable of detecting and collecting leachate at locations of maximum leak probability; and (2) hydraulically separated from groundwater to prevent erroneous monitoring results caused by infiltrating groundwater; and• Construction of an appropriate operations layer above the primary LCRS, to protect the LCRS and liner system from damage.

10.4	Design plans	<p>The Permittee must submit engineering design plans for new disposal units, closure of existing units, or other ancillary facilities for Department review and approval at least six months, if possible, prior to the anticipated construction date. The design plans must be prepared and stamped by a qualified professional engineer with current Oregon registration.</p> <p>The engineering design plans must:</p> <ul style="list-style-type: none">• Specify applicable performance criteria, construction material properties and characteristics, dimensions, and slopes; and• Provide all relevant engineering analyses and calculations as a basis for the design. <p>The permittee may commence the excavation of soil from an existing or future landfill module prior to the submittal of design plans.</p>
10.5	Construction requirements	<p>The Permittee must perform all construction in accordance with approved plans and specifications, including all conditions of approval, and any amendments to those plans and specifications approved in writing by the Department.</p>
10.6	Construction documents	<p>Prior to construction of the final landfill cover, a new landfill unit disposal unit, or other waste containment unit at the site, the Permittee must submit and receive written Department approval of complete construction documents for the project to be constructed. The construction documents submitted must:</p> <ul style="list-style-type: none">• Define the construction project team;• Include construction contract documents specifying material and workmanship requirements to guide how the Constructor is to furnish products and execute work; and• Include a Construction Quality Assurance (CQA) plan, describing the measures taken to monitor that the quality of materials and the work performed by the Constructor complies with project specifications and contract requirements. <p><u>Reference:</u> Following the current <i>Solid Waste Guidance</i> will expedite Department review of the construction documents.</p>
10.7	Construction inspection	<p>During construction of a new landfill disposal unit or final cover system, the Permittee must provide the Department with a summary and schedule of planned construction activities in order to facilitate Department inspection during periods of construction.</p>
10.8	Construction report submittal	<p>Within 90 days of completing construction of a landfill disposal unit, a final cover system over an existing or new unit, or a major appurtenant facility, the Permittee must submit to the Department a <u>Construction Certification Report</u>, prepared by a qualified independent party, to document and certify that all required components and structures have been constructed in compliance with the permit requirements and approved design specifications.</p>

10.9 Construction report content	<p>The construction report must include:</p> <ul style="list-style-type: none">• An executive summary of the construction project and any major problems encountered;• A list of the governing construction documents;• A summary of all construction and CQA activities;• Manufacturers certifications for conformance of all geosynthetic materials with project specifications;• Test data documenting soil materials conformance with project specifications;• A summary of all CQA observations, including daily inspection records and test data sheets documenting materials deployment and installation in conformance with project specifications;• Problem identification and corrective measures implemented;• Designer acceptance reports for errors and inconsistencies;• A list of deviations from design and material specifications, including documentation justifying the deviations, copies of change orders and recorded field adjustments, and copies of written Department approvals for deviations and change orders;• Signed certificates for subgrade acceptance prior to placement of soil liner and for acceptance of soil liner prior to deployment of geomembrane liner; and• Photographs and as-constructed drawings, including record surveys of subgrade, soil liner, granular drainage layer and protective soil layer, and a certification statement(s) and signatures legally representing the CQA consultant, designer and facility owner, one of which is that of a professional engineer with current Oregon registration.
10.10 Approval to use	<p>The Permittee must not dispose of solid waste in newly constructed disposal units until the Department has accepted the Construction Certification. If the Department does not respond to the Construction Certification Report within 30 days of its receipt, the Permittee may place waste in the unit.</p>
10.11 Submittal address	<p>All submittals to the Department under this section must be sent to:</p> <p style="text-align: center;">Oregon Department of Environmental Quality Manager, Solid Waste Program 400 E Scenic Drive, Suite 307 The Dalles, OR 97058 Telephone: (541) 298-7255</p>

11.0 RECYCLING REQUIREMENTS

11.1	In this section	<p>This section describes the requirements associated with recycling operations of source separated materials conducted at the facility:</p> <ul style="list-style-type: none">• Materials;• Receiving location;• Material use;• Recycling information;• Sign; and• Storage.										
11.2	Materials	<p>The Permittee must provide a place for receiving the following recyclable materials:</p> <table><tr><td><input checked="" type="checkbox"/> ferrous scrap metal</td><td><input checked="" type="checkbox"/> non-ferrous scrap metal (including aluminum)</td></tr><tr><td><input checked="" type="checkbox"/> motor oil</td><td><input type="checkbox"/> corrugated cardboard and kraft paper (brown paper bags)</td></tr><tr><td><input type="checkbox"/> newspaper</td><td><input type="checkbox"/> tin cans</td></tr><tr><td><input type="checkbox"/> container glass</td><td></td></tr><tr><td><input type="checkbox"/> hi-grade office paper</td><td></td></tr></table>	<input checked="" type="checkbox"/> ferrous scrap metal	<input checked="" type="checkbox"/> non-ferrous scrap metal (including aluminum)	<input checked="" type="checkbox"/> motor oil	<input type="checkbox"/> corrugated cardboard and kraft paper (brown paper bags)	<input type="checkbox"/> newspaper	<input type="checkbox"/> tin cans	<input type="checkbox"/> container glass		<input type="checkbox"/> hi-grade office paper	
<input checked="" type="checkbox"/> ferrous scrap metal	<input checked="" type="checkbox"/> non-ferrous scrap metal (including aluminum)											
<input checked="" type="checkbox"/> motor oil	<input type="checkbox"/> corrugated cardboard and kraft paper (brown paper bags)											
<input type="checkbox"/> newspaper	<input type="checkbox"/> tin cans											
<input type="checkbox"/> container glass												
<input type="checkbox"/> hi-grade office paper												
11.3	Receiving location	<p>The place for receiving recyclable material must be located at the disposal site or at another location more convenient to the population served by the disposal site. The recycling center must be available to every person whose solid waste enters the disposal site.</p>										
11.4	Material use	<p>All source separated recyclable materials must be reused or recycled.</p>										
11.5	Recycling information	<p>The Permittee must provide recycling information to disposal site users on printed handbills which includes the following:</p> <ul style="list-style-type: none">• The location of the recycling center at the disposal site or another location;• The hours of operation of the recycling center;• Instructions for correct preparation of accepted source separated recyclable material;• The material accepted for recycling; and• Reasons why people should recycle.										
11.6	Sign	<p>A sign must be prominently displayed which indicates:</p> <ul style="list-style-type: none">• The availability of recycling at the disposal site or another location; <p><u>Note:</u> the sign must indicate the recycling center location, if not at the disposal site</p> <ul style="list-style-type: none">• The materials accepted at the recycling center; and• The hours of operation of the recycling center (if different than disposal site hours).										
11.7	Storage	<p>All recyclable materials, except car bodies, white goods and other bulky items, must be stored in containers unless otherwise approved by the Department.</p>										

SITE CLOSURE

12.0 CLOSURE CONSTRUCTION AND MAINTENANCE

12.1	In this section	<p>This section describes requirements for closure construction and maintenance at the facility, including:</p> <ul style="list-style-type: none">• Worst-case plan development;• Notification;• Closure permit;• Closure plan approval;• Closure schedule;• Final cover;• Vegetation;• Surface contour maintenance;• Deed record; and• Submittal address.
12.2	Worst-case plan development	<p>The Permittee must maintain an up-to-date conceptual "worst-case" closure plan and a conceptual post-closure plan. The plans must be placed in the facility file.</p> <p>Reference: The plans must comply with 40 CFR, Part 258, Subpart F, and OAR 340-094-0110.</p>
12.3	Notification	<p>The Permittee must notify the Department when the conceptual "worst-case" closure and conceptual post-closure care plans are updated and placed in the file.</p>
12.4	Closure permit	<p>At least five (5) years prior to the anticipated final closure of the landfill, the Permittee must apply for a closure permit in accordance with OAR 340-094-0100.</p>
12.5	Closure plan approval	<p>At least 6 months prior to final closure of any portion of the landfill, the Permittee must submit for approval detailed engineering plans, specifications, and a schedule for closure.</p> <p><u>Reference:</u> The <i>Solid Waste Landfill Guidance, September 1996</i>, provides information on applicable elements of a Closure Plan. Following the organizational format provided in the Guidance will expedite Department review of the plan.</p>
12.6	Closure schedule	<p>The Permittee must close each area of the landfill on the schedule approved by the Department.</p>
12.7	Final cover	<p>Unless otherwise approved by the Department, the final landfill cover must be:</p> <ul style="list-style-type: none">• At least three feet thick {OAR 340-094-0120(2)(a)};• Minimize infiltration of precipitation as required by 40 CFR Part 258.60; and• Graded to compensate for estimated differential settlement such that final (post-settlement) slopes will maintain positive drainage between two (2) percent and thirty (30) percent.
12.8	Vegetation	<p>The Permittee must establish and maintain a dense, healthy growth of vegetation over the closed areas of the landfill consistent with the proposed final use.</p>

12.9	Surface contour maintenance	<p>The Permittee must maintain the final surface contours of the landfill cover so that erosion and ponding of water is prevented to the maximum extent practicable. Erosion damage (cuts) must be repaired and seeded so that all waste remains covered.</p> <p>The Permittee must refill with soil, grade, and seed all areas that have settled or where water ponds, and all areas where the cover soil has been damaged by cracking or erosion. Areas where vegetation has not been fully established must be fertilized, re-seeded, and maintained.</p>
12.10	Deed record	<p>Within 30 days after final closure of the disposal site, the Permittee must record the presence of the waste in the property deed record on file with the county.</p>
12.11	Submittal address	<p>All submittals to the Department under this section must be sent to:</p> <p style="text-align: center;">Oregon Department of Environmental Quality Manager, Solid Waste Program 400 E Scenic Drive, Suite 307 The Dalles, OR 97058 Telephone: (541) 298-7255</p>
<hr/>		
13.0	FINANCIAL ASSURANCE	
13.1	In this section	<p>This section describes requirements for financial assurance at the facility, including:</p> <ul style="list-style-type: none">• Financial assurance plan;• Submittal;• Use of financial assurance;• Continuous nature; and• Submittal address.
13.2	Financial assurance plan	<p>The Permittee must maintain a financial assurance plan and provide financial assurance for the costs of site closure, post-closure care, and corrective action, if any. The plan must be placed in the facility file.</p> <p><u>Reference:</u> The plan must be prepared in accordance with OAR 340-94-140. Acceptable mechanisms are described in OAR 340-94-145.</p>
13.3	Submittal	<p>The Permittee must submit to the Department evidence of the financial assurance consisting of:</p> <ul style="list-style-type: none">• A copy of the first financial assurance mechanism; and• A written certification that the financial assurance meets all state requirements. <p><u>Note:</u> The Permittee must annually review and update financial assurance in accordance with OAR 340-094-0140(6)(e).</p>
13.4	Use of financial assurance	<p>The Permittee must not use the financial assurance for any purpose other than to finance the approved closure, post-closure, and corrective action activities or to guarantee that those activities will be completed.</p>

13.5	Continuous nature	Continuous financial assurance must be maintained for the facility until the Permittee or other person owning or controlling the site is no longer required to demonstrate financial responsibility for closure, post-closure care, or corrective action (if required).
13.6	Submittal address	All submittals to the Department under this section must be sent to: Oregon Department of Environmental Quality Manager, Solid Waste Program 400 E Scenic Drive, Suite 307 The Dalles, OR 97058 Telephone: (541) 298-7255

ENVIRONMENTAL MONITORING

14.0 ENVIRONMENTAL MONITORING PLAN (EMP)

14.1	In this section	<p>This section describes requirements for an Environmental Monitoring Plan (EMP) for the facility, including:</p> <ul style="list-style-type: none">• EMP submittal;• EMP contents;• EMP maintenance;• Long term environmental monitoring;• Additional environmental monitoring points; and• Submittal address.
14.2	EMP submittal	<p>Within 180 days of the permit issue date, the Permittee must submit, for approval, two copies of an updated Environmental Monitoring Plan (EMP) to the Department. The plan must be prepared and stamped by either a Geologist or a Certified Engineering Geologist, with current Oregon registration. Upon approval, the plan is incorporated into this permit by reference.</p>
14.3	EMP contents	<p>The updated EMP must include plans that implement an environmental monitoring program that will characterize potential facility impacts. The updated plan may consist of the previous approved EMP with any changes or additions since that time (i.e., approved permit-specific concentration limits, revised parameter lists, revised schedules, new wells...). At a minimum, the updated EMP should address the issues and topics found in Section 10 of DEQ's Solid Waste Guidance, September 1, 1996.</p>
14.4	EMP maintenance	<p>The Permittee must revise the EMP as necessary to keep it reflective of current facility conditions, procedures, and sampling requirements or changes. The Permittee must submit all EMP revisions to the Department for approval.</p>
14.5	Long-term environmental monitoring	<p>After approval of any Permit-Specific Concentration Limits (PSCLs), Concentration Limit Variances (CLVs), Action Limits (ALs), or Site-Specific Limits (SSLs) the Permittee must update the EMP to reflect the long-term monitoring plan and submit the updated plan for Department review and approval.</p> <p><u>Note:</u> See also the requirements for establishing PSCLs, ALs, or SSLs in this permit, procedures for establishing CLVs can be found in OAR 340-40-030(4).</p>
14.6	Additional environmental monitoring points	<p>Any new or replacement monitoring point or device established during the time frame of this permit must be incorporated into the Environmental Monitoring Plan (EMP). The updated plan must be resubmitted to the Department for approval.</p>
14.7	Submittal address	<p>All required copies of submittals to the Department under this section must be received by the due date and delivered to:</p> <p>Oregon Department of Environmental Quality Manager, Solid Waste Program 400 E Scenic Drive, Suite 307 The Dalles, OR 97058 Telephone: (541) 298-7255 Fax: (541) 298-7330</p>

15.0 ENVIRONMENTAL SAMPLING REQUIREMENTS

15.1 In this section

This section also describes general sampling requirements, including:

- Notification;
- Split sampling;
- Monitoring schedule;
- Interim monitoring;
- Monitoring after EMP approval;
- Changes in sampling or split sampling; and
- Leachate and liquid volume monitoring.

15.2 Notification

The Department must receive written notification of all upcoming sampling events at least ten (10) working days prior to the scheduled date of the sampling event at the following address:

Oregon Department of Environmental Quality
Manager, Solid Waste Program
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255
Fax: (541) 298-7330

15.3 Split sampling

The Permittee must split samples with the Department when requested, and must schedule all requested split-sampling events with the Department laboratory at least forty-five (45) days prior to the sampling event. The Permittee is required to sample for parameter groups 1, 2, and 3, for all sampling points.

The following sampling events must be conducted as split sampling events with the Department:

- Fall 2010;
- Spring 2013; and
- Fall 2016.

Reference: Parameter Groups are further defined in Attachment 1

15.4 Monitoring schedule

The Permittee must perform environmental monitoring according to the approved EMP. Quarters are defined as the following:

If sampling in the...	Schedule the sampling event	
	On, or after....	But on, or before...
Winter	January 1	February 28
Spring	April 1	May 31
Summer	July 1	August 31
Fall	October 1	November 30

**15.5 Interim
monitoring**

Until superseded by an updated Environmental Monitoring Plan approved by the Department, the Permittee must conduct all environmental sampling in accordance with the following documents as approved by the Department:

- October 9, 2001 Environmental Monitoring Plan Columbia Ridge Landfill and Recycling Center, Gileam County, Oregon, prepared by HWA Geosciences;

The Permittee must commence semiannual groundwater sampling at those wells which are downgradient of the existing filling area, MWS-04 and MWS-05. All semiannual groundwater sampling must be conducted during the spring (April 1 - May 31) and fall (October 1 - November 30) quarters. Upgradient well MWS-02 and MWS-03 are to be sampled annually during the fall quarter (October 1 - November 30).

The Department must approve any changes to the sampling program in writing prior to implementation. The Permittee must notify the Department's Eastern Region office located in The Dalles in writing of all upcoming sampling events at least 10 days prior to the sampling event.

Reference: Parameter Groups are further defined in Attachment 1

15.6	Monitoring after EMP approval	Upon approval, the Permittee must perform all environmental monitoring at the facility in accordance with the site-specific Environmental Monitoring Plan (EMP), including any conditions of the approval, and all approved amendments and updates.
15.7	Changes in sampling or split sampling	<p>The Department must approve any changes to the sample program in writing prior to implementation. The Permittee may make written requests to change: sample frequencies; parameters to be sampled for; or locations to be sampled. Once approved, this will become part of the EMP requirements by reference.</p> <p>The Department reserves the right to add to or delete from the list of scheduled sampling events, sample locations, parameters to be sampled for, and to conduct unscheduled samplings or split sampling.</p> <p>In the event of changes to the split-sampling schedule, the Department will make an effort to notify the Permittee of any changes at least 30 days prior to the event.</p>
15.8	Leachate and liquid volume monitoring	<p>The Permittee must measure, record, and place in the Operating Record and the Annual Environmental Monitoring Report the following:</p> <ul style="list-style-type: none">• The weekly volume of leachate removed from each primary leachate collection sump;• The weekly volume of leachate disposed by each implemented leachate disposal method;• The weekly volume of liquid removed from each secondary leachate collection sump, servicing an active disposal unit(s).

16.0 ESTABLISHING PERMIT-SPECIFIC CONCENTRATION LIMITS

16.1	In this section	<p>This section describes requirements for establishing Permit-Specific Concentration Limits (PSCLs), Concentration Limit Variances (CLVs), Action Limits (ALs), and/or Site-Specific Limits (SSLs) for groundwater monitoring, including:</p> <ul style="list-style-type: none">• Gathering Data;• Statistical analysis;• PSCLs;• Changing PSCLs, ALs or SSLs; and• Setting and changing CLVs.
16.2	Gathering data	Semi-annual groundwater sampling for compliance well MWS-07 shall begin starting 2012.
16.3	Statistical analysis	<p>The Permittee must perform statistical evaluations of monitoring results for each sampling event in accordance with 40 CFR 258.53 or other methods approved of in advance by the Department in order to establish compliance concentration limits.</p> <p><u>References:</u> <i>Statistical Analysis of Groundwater Monitoring Data at RCRA facilities, Addendum to Interim Final Guidance</i>, USEPA, June 1992</p> <p><i>Statistical Guidance for all RCRA Sites</i>, DEQ:SWPC, August 3, 1992</p>

16.4	PSCLs	Permit-Specific Concentration Limits (PSCLs) for long term monitoring program parameters have been established in the following document: <ul style="list-style-type: none">• October 9, 2001 Environmental Monitoring Plan, Columbia Ridge Landfill and Recycling Center, Gilliam County, Oregon, prepared by HWA Geosciences.
16.5	Changing PSCLs, ALs, and/or SSLs	<p>Based on the Department-approved statistical methodology, the Permittee can review, update or revise PSCLs every five years.</p> <p>If the Permittee can demonstrate to the Department's satisfaction that the background groundwater quality has significantly changed since the PSCL, AL, or SSL was established, and this change is not due to any influence from the permitted facility, then the Permittee can propose for Department approval a revised level of the specific PSCL(s), AL(s), or SSL(s) that are affected.</p>
16.6	Setting and changing CLVs	OAR – 340-040-0030 (4) explains how CLVs are set and changed.

17.0 ENVIRONMENTAL MONITORING STANDARDS

17.1	In this section	<p>This section describes requirements for evaluating compliance with environmental monitoring standards, including:</p> <ul style="list-style-type: none">• Rule;• Compliance points;• Review of monitoring results;• Resampling results;• Leak Detection System;• Methane limits; and• Methane exceedances.
17.2	Rule	The Permittee must not allow the release of any substance from the landfill into groundwater, surface water, or any other media which will result in a violation of any applicable federal or state air or water limit, drinking water rules, or regulations beyond the solid waste boundary of the disposal site or an alternative boundary specified by the Department.
17.3	Compliance points	<p>The following monitoring locations are designated as compliance points:</p> <ul style="list-style-type: none">• MWS04, MWS05 and MWS07(2012); and• Basin Lysimeters – All basin lysimeters monitoring leak detection system.

17.4 Review of monitoring results

The Permittee must review the analytical results after each monitoring event according to the following table.

If data show results are...	Then...
<p>above any one PSCL, CLV, or AL, or more than two SSLs (if established) or if results indicate a significant change in water quality at any monitoring point,</p> <p><u>Note: Examples of significant changes</u></p> <ul style="list-style-type: none"> • Detection of a VOC or other hazardous constituent not detected in background; • Exceedance of a Table 1 or 3 value listed in OAR 340-40 unless the background water quality is above these numerical limits; • Exceedance of a Safe Drinking Water Standard; and • Detection of a compound in an order of magnitude higher than background. 	<ol style="list-style-type: none"> 1. Notify the Department in writing within 10 days of receipt of laboratory results; and, 2. Perform resampling immediately and evaluate results as described below. <p><u>Note: If this is a known release, previously confirmed to the department in writing, resampling is not required.</u></p>
None of the above	Continue groundwater monitoring with next scheduled sampling event.

Note: PSCLs, CLVs, ALs, and SSLs established to date are listed in the Environmental Monitoring Plan. All PSCLs and SSLs, when revised, will be listed in Attachment 2.

17.5 Resampling results

Upon receipt of data from resampling, the permittee must review the results according to the following table.

If resampling data show results...	then: ...
<p>that confirm the exceedance of at least one permit-specific concentration limit (PSCL) or concentration limit variance (CLV),</p> <p>*See Attachment 1: Parameter Groups</p>	<ol style="list-style-type: none"> 1. Notify the Department in writing within 10 days of receipt of laboratory data, or within 60 days of the sample date (whichever occurs first); and 2. Submit a Remedial Investigation workplan for Department approval within 90 days of the date of resampling. Plan must specify how the objectives of OAR 340-40 will be met by the proposed investigation. This may include the monitoring of Groups 4 & 6* parameters, in addition to routine detection monitoring.
that confirm the significant change in water quality results noted in the routine sampling event or confirm that at least any one AL or more than two SSLs were exceeded,	<ol style="list-style-type: none"> 1. Notify the Department in writing within 10 days of receipt of laboratory data, or within 60 days of the sample date (whichever occurs first); and 2. Submit a plan within 30 days (unless another time period is authorized) for developing an assessment program to the Department.
that do not confirm the results noted in the routine sampling event,	<ol style="list-style-type: none"> 1. Continue with routine monitoring; and 2. Discuss the data from the routine sampling event and the resampling results in the next annual environmental monitoring report.

17.6	Leak detection system (LDS)	If the Permittee observes the presence of liquids in the leak detection system (LDS), then the permittee must commence the sampling and analysis and reporting procedures defined in the Department approved Environmental Monitoring Plan (EMP). If landfill impacts are confirmed in this LDS and/or the LDS is compromised as a compliance point, then the Department will require further investigation as described in the Environmental Monitoring Plan.
17.7	Methane limits	<p>The concentration of methane must not exceed:</p> <ul style="list-style-type: none">• 25 percent of the Lower Explosive Limit for methane in onsite structures (excluding gas control structures or gas recovery system components); or• The Lower Explosive Limit for methane at the facility boundary. <p><u>Note:</u> The Lower Explosive Limit for methane is 5 percent.</p>
17.8	Methane exceedances	<p>If methane levels exceed the specified limits, then the Permittee must:</p> <ul style="list-style-type: none">• Immediately take all necessary steps to ensure protection of human health;• Within 7 days of detection (unless the Department approves an alternative schedule), enter the methane levels in the operating record and describe measures taken to protect human health and safety; and,• Within 60 days of detection, implement a remediation plan for the methane releases, incorporate the plan into the monitoring records, and notify the Department that the plan has been implemented.

18.0 RECORDKEEPING AND REPORTING – ENVIRONMENTAL MONITORING

18.1	In this section	<p>This section describes recordkeeping and reporting requirements associated with environmental monitoring, including:</p> <ul style="list-style-type: none">• Annual environmental monitoring report (AEMR);• Statement of compliance;• Annual environmental monitoring report contents;• Submittal address;• Split sampling submittal;• Lab address; and• Department response to split samples.
18.2	Annual environmental monitoring report (AEMR)	<p>Prior to April 30 of each year for the duration of this permit, the Permittee must submit to the Department two copies of an annual monitoring report covering the past year from January 1st to December 31st. The report must be prepared and stamped by either a Geologist or a Certified Engineering Geologist, with current Oregon registration. The report must follow the format approved in the Environmental Monitoring Plan.</p> <p><u>Note:</u> Whenever possible, the Permittee must submit two-sided copies of all reports.</p>
18.3	Statement of compliance	<p>A short (approximately one-page) cover letter must accompany the AEMR that:</p> <ul style="list-style-type: none">• Compares the analytical results with the relevant monitoring standards (PSCLs, CLVs, ALs, or SSLs);• States whether or not federal or state standards were exceeded for the relevant media; and• States whether or not a significant change in water quality has occurred.
18.4	Annual environmental monitoring report (AEMR) contents	<p>Each AEMR must reflect actual and true conditions at the facility. Data presented in the reports must be as error-free as possible compared to the original field and lab data. The AEMR, at a minimum, must contain:</p> <ul style="list-style-type: none">• Review of all significant events that occurred at the site during the last year;• Review of the monitoring network performance and recommendations for changes;• Summary of all the data collected in the past year including, but not limited to: groundwater, leachate (lagoon and basin lysimeters), LFG (include any air sample data), and soil samples;• A summary of any data problems (examples could include, but are not limited to QA/QC failures, flagged data, switched samples, etc.);• Piezometric maps for each sampling event for each monitored water bearing zone of concern;• Time history plots for field specific conductivity, dissolved oxygen, and all group 1b and group 2a and 2b parameters;• Box plots for field specific conductivity, dissolved oxygen, and all group 1b and group 2a and 2b parameters;• For each location and sample event an anion-cation balance for each location that has adequate data. An additional explanation must be included for any balance outside of $\pm 10\%$ in error;• A copy of all field and lab data for the past year.

- 18.5 Submittal address** Except where otherwise noted, all required copies of submittals to the Department under this section must be received by the due date and delivered to:
Oregon Department of Environmental Quality
Manager, Solid Waste Program
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255
Fax: (541) 298-7330
-
- 18.6 Split sampling submittal** Within 90 days of any split sampling event, the Permittee must submit the following information from the split sampling event to the Department's laboratory:
- A copy of all information pertinent to the sample collection handling, transport and storage, including field notes;
 - Copies of all laboratory analytical reports;
 - Copies of all laboratory QA/QC reports;
 - Site map showing flow directions and contours; and
 - Any other data or reports requested by the Department.
- 18.7 Lab address** All split sampling reporting must be sent to:
Oregon Department of Environmental Quality
Lab, Groundwater Monitoring Section
1712 SW 11th Avenue
Portland, OR 97201
(503) 229-5983
- 18.8 Department response to split samples** If requested by the Permittee and after the Permittee has submitted all split sampling data information, the Department lab may send the permittee a copy of:
- The Department's analysis of the split sample;
 - A copy of the QA/QC report;
 - A copy of the analytical report; and/or,
 - A copy of field data sheets.

19.0 ENVIRONMENTAL MONITORING NETWORK

19.1	In this section	<p>This section describes requirements for the environmental monitoring network, including:</p> <ul style="list-style-type: none">• Well installation;• Monitoring devices;• Access to monitoring devices;• Damage reporting;• Device construction;• Construction reporting;• Gas system maintenance;• Gas system damage repair; and• Submittal address.
19.2	Well installation	<p>A workplan must be submitted at least 90 days before construction of any new gas and groundwater monitoring wells. All approved groundwater detection and/or compliance wells must be installed and monitored quarterly at least 12 months before refuse is accepted for disposal.</p>
19.3	Monitoring devices	<p>The Permittee must protect, operate, and maintain gas, groundwater, leachate, and surface water monitoring devices so that samples representative of actual conditions can be collected.</p>
19.4	Access to monitoring devices	<p>The Permittee must maintain reasonable all-weather access to all monitoring devices and/or locations in order to facilitate sample collection and/or inspection.</p>
19.5	Damage reporting	<p>Any damage to a monitoring device must be reported to the Department in writing within fourteen (14) days of the discovery, along with a description of proposed repair or replacement measures and a time schedule for completion of this work.</p> <p><u>Examples:</u> damage impairing well function or changing the physical location to any degree.</p>
19.6	Device construction	<p>All monitoring well abandonment (decommissions), replacements, repairs, and installations must be conducted to comply with the Water Resources Department Rules OAR 690-240 and with the Department's <i>Guidelines for Groundwater Monitoring Well drilling, Construction, and Decommissioning</i> dated August 1992.</p>
19.7	Construction reporting	<p>All monitoring well repairs, abandonments, replacements, and installations, including driller's logs, well location information, and construction information must be documented in a report prepared and stamped by either a Geologist or a Certified Engineering Geologist, with current Oregon registration. The report must be submitted to the Department within thirty (30) days of the action and included in the next AEMR.</p>
19.8	Gas system maintenance	<p>The Permittee must operate and maintain in good working order the landfill gas containment, collection, removal, treatment, and monitoring system such that nuisance odors are deterred to the maximum extent practical and methane concentrations do not exceed compliance limits.</p>
19.9	Gas system damage repair	<p>Within 60 days of discovery of the damage, the Permittee must replace or repair the damage to any equipment in the gas system and submit a written inspection report to the Department.</p>

**19.10 Submittal
address**

All required copies of submittals to the department under this section must be received by the due date and delivered to:

Oregon Department of Environmental Quality
Manager, Solid Waste Program
400 E Scenic Drive, Suite 307
The Dalles, OR 97058
Telephone: (541) 298-7255
Fax: (541) 298-7330

COMPLIANCE SCHEDULE

20.0 SUMMARY OF DUE DATES

- 20.1 Summary** The following is a summary of event-driven reporting required by this permit. This section does not include routine reporting and submittals required by this permit.

Due Date	Activity	See section...
Within five (5) years of permit issuance	Submit updated Operations Plan	7.2 Operations Plan
By no later than May 31, 2015	Submit site development plan	10.2 Site development plan
6 months before any construction (if possible)	Submit design plans	10.4 Design plans
90 days after completion of any major construction	Submit construction certification report	10.8 Construction report
5 years prior to closure	Submit closure permit application	12.4 Closure permit
Annually	Submit copy of financial assurance mechanism and certification	13.3 Financial Assurance plan
Within 180 days of permit issuance	Submit updated Environmental Monitoring Plan (EMP)	14.2 Environmental Monitoring Plan
By April 30 for each year this permit is in effect	Submit an Annual Environmental Monitoring Report (AEMR)	18.2 AEMR
30 days of any well construction	Submit well construction report	19.7 Construction reporting

ATTACHMENTS

- 21.1 Attachment listing** The following attachments to this document are:

Number	Description
1	Parameter Groups
2	Permit-specific concentration limits

ATTACHMENT 1: PARAMETER GROUPS

In this attachment

This attachment describes the parameter groups and any associated requirements for environmental monitoring.

Note: Method means EPA SW 846 Method [suggested methods are in square brackets].

Group 1a: Field indicators

The following parameters comprise the field indicators parameter group:

Elevation of water level	Specific Conductance
pH	Dissolved Oxygen
Temperature	Eh

These parameters must be measured in the field at the time samples are collected, either down-hole in situ, in a flow-through well, or immediately following sample recovery, with instruments calibrated to relevant standards.

Group 1b: Leachate indicators

The following parameters comprise the laboratory indicators parameter group:

Hardness (as CaCO ₃)	Total Dissolved Solids (TDS)
Total Alkalinity (as CaCO ₃)	Total Suspended Solids (TSS)
Total Organic Carbon (TOC)	Chemical Oxygen Demand (COD)
pH (lab)	Tannin/Lignin
Specific Conductance (lab) [Method 9050]	

Sample handling, preservation, and analysis are determined by requirements for each individual analyte: EPA or AWWA Standard Methods techniques must be followed.

Group 2a: Common anions and cations

The following parameters comprise the common anions and cations parameter group:

Calcium (Ca)	Manganese (Mn)
Sulfate (SO ₄) [Method 9035]	Magnesium (Mg)
Ammonia (NH ₃)	Chloride (Cl) [Method 9250]
Sodium (Na)	Carbonate (CO ₃)
Nitrate (NO ₃) [Method 9210]	Potassium (K)
Silica (SiO ₂)	Bicarbonate (HCO ₃)
Iron (Fe)	Ammonium (NH ₄)
Fluoride (F)	

Dissolved concentrations must be measured. Samples must be field-filtered and field-preserved according to standard DEQ and/or EPA guidelines and analyzed by appropriate EPA or AWWA Standard Methods techniques. Results must be reported in mg/L and meq/L.

**Group 2b:
Trace metals**

The following parameters comprise the trace metals parameter group:

Antimony (Sb)	Chromium (Cr)	Selenium (Se)
Arsenic (As)	Cobalt (Co)	Silver (Ag)
Barium (Ba)	Copper (Cu)	Thallium (Tl)
Beryllium (Be)	Lead (Pb)	Vanadium (V)
Cadmium (Cd)	Nickel (Ni)	Zinc (Zn)

If the Total Suspended Solids concentration is...*	then analyze for...
less than or equal to 100.0 mg/L in the sample	total concentrations (unfiltered)
Greater than 100.0 mg/L in the sample	both total (unfiltered) and dissolved (field-filtered)

Samples must be field-preserved according to standard DEQ and/or EPA guidelines and analyzed by EPA Method 6010 or department-approved equivalent.

**Group 3:
Volatile organic constituents**

Analysis for all compounds detectable by EPA Method 8260A or EPA Method 524.2, including a library search to identify any unknown compounds present. EPA Method 8260 comprises the volatile organic constituents parameter group. Facilities that want to use EPA Methods 8021, or 8240B, as an alternative must obtain approval by the Department prior to use.

**Group 4:
Assessment monitoring**

The following analyses comprise the assessment monitoring parameter group:

Semi-volatile Organic Constituents, including Phenols, EPA Method 8270
 Mercury, EPA Method 7470
 Cyanide, EPA Method 9010
 Nitrite

All Method 8270 analyses must include a library search to identify any unknown compounds present.

**Group 5:
Surface water and leachate**

The following parameters comprise the surface water parameter group:

Total Kjeldahl Nitrogen (TKN) Total Coliform Bacteria [EPA Method 9131]
 Total Phosphorus (P) Fecal Coliform Bacteria [EPA Method 9131]
 Orthophosphate (PO₄) E. Coli
 Biological Oxygen Demand (BOD)
 Total Halogenated Organics (TOX) [EPA Method 9020B]

**Group 6:
Other Assessment parameters**

The following comprise additional assessment parameters:

Dioxins and Furans [EPA Methods 8280 and/or 8290]
 Phenolics [EPA Methods 9065, 9066, and 9067]
 PCBs [EPA Methods 8080 and 8270]
 Pesticides, Herbicides and Fungicides [EPA Methods 8080, 8141, 8150, 8151, 8270]



Greater Wenatchee Regional Landfill

Jorgensen Forge Draft TTD Work Plan 40 September 2013



PUBLIC HEALTH
ALWAYS WORKING FOR A SAFER AND
HEALTHIER COMMUNITY

Chelan-Douglas Health District

200 Valley Mall Parkway, East Wenatchee, WA 98802

Personal Health: 509/886-6400 • FAX 886-6478

Environmental Health: 509/886-6450 • FAX 886-6449

Maternal Child Health: 509/886-6400 • FAX 886-6436

CHELAN-DOUGLAS HEALTH DISTRICT

COMBINED OPERATING PERMIT for MUNICIPAL SOLID WASTE LANDFILLING AND SOLID WASTE HANDLING FACILITY

Section 1.0 Permit Administration

1.1 Facility Name: Greater Wenatchee Regional Landfill and Recycling Center (GWRLRC)

Facility Location: 191 South Webb Road, Douglas County, Washington

1.2 Parcel numbers and acreage: 22211130000 (110 acre), 22211410001 (38.1 acre), 22211410002 (30 acre), 22211420002 (19.2 acre), 22211420004 (9.1 acre), 22211420003 (9.2 acre), 22211420005 (9.6 acre), 22211420006 (10 acre), 22211420009 (9.1 acre), 22211420007 (9.5 acre), 22211420008 (8.4 acre)- total 262.2 acres.

1.3 The Permittee

Owner/Operator: Waste Management of Washington, Inc.

Name of Contact: David K. Lowe

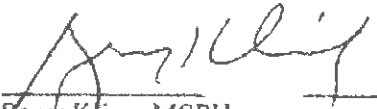
Address: 191 S. Webb Road, East Wenatchee, WA 98802

Telephone: (509)884-2802

1.4 Issued in Response to:

- Solid waste permit application received on January 16, 2007, revision received August 2, 2007
- Douglas County Conditional Use Permit, application received June 1, 2005 and revisions
- Douglas County Expanding Non Conforming Use, April 1, 2005 and subsequent revisions
- Douglas County Recreational Overlay, April 1, 2005, and subsequent revisions
- Department of Ecology Air Quality Notice of Construction Permit application received February 1, 2006 and subsequent additional information
- Douglas County Hearing Examiner Decision, IV Conditions of Approval, February 1, 2007
- Environmental Impact Statement January 4, 2007

The determination to issue this permit is based on findings and technical information included in the permit record.


Barry King, MSPH
Administrator and Environmental Health Director
Chelan-Douglas Health District

Date

11/1/12

Date of Issuance: 7/11/08

Expiration Date: July 10, 2018

Date of Renewal

11/1/12

Table of Contents

Section	Topic	See Page
1.0	Permit Administration	1-2
2.0	Permit Authorization	3-5
3.0	Demonstrations	5
4.0	Construction and Operational Procedures	5-6
5.0	Plan of Operation & Operational Requirements	6-8
6.0	Ground Water Monitoring	8
7.0	Quality Assurance and Quality Control	8
8.0	Closure Post-Closure	8
9.0	Financial Assurance	8-9
10.0	Other Specific Conditions	9
11.0	General Permit Processes	9-10
12.0	Appeals	10
13.0	Additional Standard Conditions	10

1.5 Basis for Issuance

This permit is issued based upon the following documents submitted by the Permittee:

- **GWRL Expansion Permit Application January 2007 Version and noted revisions**
- **Response to Comments Concerning the January 2007 Permit Application for Expansion of the Greater Wenatchee Regional Landfill**
- **A signed permit application form**
(7/17/07 signed form)
- **Appendix "A", Hydrogeological Characterization Report, Vols. I & II**
- **Appendix "B", Plan of Operation**
7/31/07 revisions
9/2007 revisions
12/2007 revisions
- **Appendix "C", Design Report**
7/31/07 revisions
10/16/07 revisions
- **Appendix "D", Engineering Plans**
1/28/08 (full sized plans)
- **Appendix "E", Construction Quality Control/Construction Quality Assurance Manual**
- **Appendix "F", Closure and Post-Closure Plan**
7/31/07 revisions
9/27/07 revisions
Financial assurance instrument submittals, 11/8/05 and 12/5/07
- **Appendix "G", Demonstrations Regarding Location Restrictions**
7/31/07 revisions
- **Appendix "H", Environmental Monitoring Plan**
7/31/07 revisions

2.0 Authorization

- 2.1 **Definitions** unless otherwise specified, all terms are as defined in chapters 173-351, 173-350 and 173-304 WAC as applicable.
- 2.2 **Authorization.** The Permittee is hereby authorized to conduct activities associated with landfilling of municipal solid waste, inert waste storage and crushing, material recovery operations and leachate impoundment in conformance with the attached general and specific conditions upon the basis of information supplied in the permit application and in compliance with chapter Revised Code of Washington (RCW) 70.95.163, chapter 173-351 Washington Administrative Code (WAC) and 173-350 WAC, Chelan Douglas Health District Sanitary Code and all relevant federal, state, (including state air quality and water quality regulations) and local regulations (including noise regulations). Landfill operators shall comply with the requirements established in chapter 173-300 WAC, Certification of Operators of Solid Waste Incinerator and Landfill Facilities.
- 2.3 This permit may be suspended or revoked according to the terms set forth in section 11.5 herein. If the permit is suspended or revoked, the Permittee may appeal the action according to the terms of the permit and RCW 70.95.210. See section 11.1.
- 2.4 This permit is transferable only upon prior written approval of the Chelan-Douglas Health District. The prospective transferee must demonstrate the ability to comply with laws, regulations and permit conditions.
- 2.5 This permit is subject to renewal in accordance with Section 11.2 of the General Permit Processes, until reissuance is required under Section 11.3.
- 2.6 **Description of Permitted Units, Scope of this Permit and Authorized Activities.** The Permittee is authorized to conduct the following activities during the specified times at municipal solid waste landfill units as described below:
- a.
 - i. Municipal solid waste handling facility unit name/description: **North Berm.**
 - ii. Rule applying to this unit: 4173-304 4173-351
 - iii. Types of waste authorized in this unit: See section 5.1
 - iv. Authorized design elevation as per Engineering Plan 0-2 (1/04).
 - v. Authorized design volume (including final cover) (N/A) yd³.
 - vi. Earliest authorized start of activity: Closed
 - vii. Latest authorized completion date: November 1, 2000.
 - b.
 - i. Municipal solid waste handling facility unit name/description: **Trench 1.**
(Includes area adjacent to east of Trench 1)
 - ii. Rule applying to this unit: 4173-304 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevation as per Engineering Plan 0-2 (1/04).
 - v. Authorized design volume(including final cover): NA yd³
 - vi. Earliest authorized start of activity: Closed
 - vii. Latest authorized completion date: November 1, 2000
 - c.
 - i. Municipal solid waste handling facility unit name/description: **Trench 2.**

- ii. Rule applying to this unit: 4173-304 4173-351
 - iii. Types of waste authorized in this unit: See section 5.1.
 - iv. Authorized design elevation is per Engineering Plan O-1 for Phase 1 and Plan O-2 for Phase 2.
 - v. Authorized design volume: 13,700 yd³
 - vi. Earliest authorized start of activity: continual until Phase 3 begins.
 - vii. Latest authorized completion date: TBD
- d.
- i. Municipal solid waste handling facility unit name/description: **Module 3.**
 - ii. Rule applying to this unit: 4173-304 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevation is per Engineering Design Plan O-1 for Phase 1 and O-2 for Phase 2.
 - v. Authorized design volume: 83,300 yd³
 - vi. Earliest authorized start of activity: continual until Phase 3 begins.
 - vii. Latest authorized completion date: TBD
- e.
- i. Municipal solid waste handling facility unit name/description: **Module 4.**
 - ii. Rule applying to this unit: 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevation is per Engineering Design Plan O-1 for Phase 1, Plan O-2 for Phase 2, Plan O-3 for Phase 3 and Plan O-5 for Phase 5.
 - v. Authorized design volume: 113,500 yd³
 - vi. Earliest authorized start of activity: continual until Phase 4 begins and then begins again in Phase 5.
 - vii. Latest authorized completion date: TBD
- f.
- i. Municipal solid waste handling facility unit name/description: **Module 5A.**
 - ii. Rule applying to this unit 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevation is per Engineering Plan O-2 for Phase 2, O-3 for Phase 3, O-4 for Phase 4 and O-5 for Phase 5. No activity in Phase 1.
 - v. Authorized design volume: 1,168,250 yd³
 - vi. Earliest authorized start of activity: When Phase 1 is complete as per Engineering Plan O-1.
 - vii. Latest authorized completion date: TBD
- g.
- i. Municipal solid waste handling facility unit name/description: **Module 5B.**
 - ii. Rule applying to this unit: 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevation is per: Engineering Plan O-3 for Phase 3 and O-5 for Phase 5. No activity in Phase 1, Phase 2 or Phase 4.
 - v. Authorized design volume: 723,000 yd³.
 - vi. Earliest authorized start of activity: When Phase 2 as per Engineering Plan O-2 is complete.

- vii. Latest authorized completion date: TBD
- h.
 - i. Municipal solid waste handling facility unit name/description: **Module 6A**
 - ii. Rule applying to this unit: 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevations as per Engineering Plans O-4 for Phase 4 and O-5 for Phase 5.
 - v. Authorized design volume: 857,360 yd³
 - vi. Earliest authorized start of activity: When Phase 3 is complete.
 - vii. Latest authorized completion date: TBD
- i.
 - i. Municipal solid waste handling facility unit name/description: **Module 6B.**
 - ii. Rule applying to this unit: 4173-351
 - iii. Types of waste authorized in this unit: See Section 5.1.
 - iv. Authorized design elevation as per Engineering Plan O-5 of Phase 5.
 - v. Authorized design volume: 635,170 yd³
 - vi. Earliest authorized start of activity: When Phase 4 is complete.
 - vii. Latest authorized completion date: TBD
- j.
 - i. Municipal solid waste handling facility unit name description: **Leachate Impoundment 1**
 - ii. Rule applying to this unit: ✓173-350
 - iii. Types of waste authorized in this unit: municipal solid waste leachate.
- k.
 - i. Municipal solid waste handling facility unit name description: **Materials Recovery Facility**
 - ii. Rule Applying to this unit: ✓173-350
 - iii. Types of waste authorized in this unit: Source separated recyclable materials, not limited to paper, metal and glass as per the local solid waste management plan.

Section 3.0 Demonstrations In granting this permit, the Health District acknowledges the demonstrations found in the January 2007 Appendix "G" of the January 2007 permit application with July 2007 revisions.

Section 4.6 Construction and Operational Procedures

- 4.1 The existing conceptual design for Module 5C, Module 6C and Module 7 require power line relocation and approval from the Washington State Department of Archaeology and Historic Preservation to construct over an archaeologically sensitive site on the talus slope prior to approval to construct.
- 4.2 A comprehensive demonstration is required that shows placing waste over the closed North Berm, will not be a threat to public health, the environment or public safety and meet regulatory performance requirements at the time of the demonstration.
- 4.3 For each new or laterally expanded unit, the Permittee shall have updated financial assurance as per section 9.0 of this permit, and submit final design drawings, construction specifications, construction quality assurance manual and any changes to the Plan of Operation at least sixty (60) calendar days prior to the beginning construction. The Permittee shall not begin construction until

the Health District approves these documents as conforming with the engineering report and all requirements of chapter 173-351 WAC.

- 4.4 The Permittee is authorized to accept solid waste at any new or laterally expanded unit, only after a licensed engineer, having supervised construction, certifies that the construction is in accordance with this permit and in accordance with the construction quality assurance plans. This must be submitted within three months of completion of construction. The operator must notify the Health District in writing of the date when solid waste will be first received at the unit.
- 4.5 One hundred and eighty (180) calendar days prior to beginning closure activities, specified in Section 2.0, the Permittee shall notify the Health District and the financial assurance trustee and/or insurer of the intent to close each unit or all units according to the approved closure plan, and submit final engineering closure plans to the Health District for review, comments, and approval. Closure activities shall not begin until approval in writing from the Health District for closure has been received.
- 4.6 If construction or operation activities started under this permit issued pursuant to this chapter cease for a period of twelve consecutive months, the Health District may at its discretion revoke the permit. The Health District shall provide written notice to the owner or operator in writing explaining the reasons for revocation. The Health District shall not revoke a permit where the cessation of construction or operation is caused by factors beyond the reasonable control of the Permittee or when such cessation is in accordance with the provisions of the permit.

Section 5.0 Plan of Operation and Operational Requirements All operational and maintenance activities conducted at the facility shall be in conformance with the Plan of Operation, dated as per Section 1.5, which is hereby approved with revisions as a result of the applicant's responses to Health District and Department of Ecology written comments. The Permittee is subject to operational and maintenance conditions as follows:

5.1 Waste Acceptance

- a. The Permittee is authorized to accept for disposal, solid waste as specified in Chapter 173-351 WAC, chapter 173-350 WAC and by chapter 173-303 WAC Dangerous Waste Regulation and any subsequent revisions or new regulations that apply to this facility. Examples of acceptable wastes are municipal solid waste and non-municipal solid waste, including industrial, inert and demolition, wood waste, asbestos waste material, other types of non-hazardous solid waste and solid wastes that have been excluded, exempted or otherwise removed from regulation under Chapter 173-303 WAC, the Dangerous Waste Regulation or otherwise excluded by state law, provided that such non-municipal wastes are co-disposed with municipal solid waste stream in a unit authorized in Table 1 of this permit, and such disposal is not elsewhere prohibited by law.
- b. The Permittee must implement the procedures for excluding the receipt of dangerous waste according to the approved Plan of Operation.

- 5.2 Air Criteria.** The Permittee must comply with all applicable requirements of Chapter 70.94 RCW and WAC 173-350-040(4) and shall not conduct open burning unless authorized in the approved Plan of Operation and in conformance with state and local requirements. Household waste shall not be openly burned under any conditions.

- 5.3 Run-on/Run-off Control Systems.** The Permittee shall maintain the run-on/run-off control systems for the active and closed municipal solid waste landfill facility units according to the approved Plan of Operation, Design Report and the approved Engineering Plans.
- 5.4 Record Keeping.** The Permittee shall keep records required by the Plan of Operation and WAC 173-351-200(10) and other citations in this regulation at an approved location. The Permittee shall notify the Health District when documents (not otherwise excluded from this requirement in the Plan of Operation) have been placed in or added to the operating record. The Permittee shall furnish all information contained in the Operating Record for inspection at all reasonable times to the Health District including the following special reports:
- a. Sewage sludge received for disposal as per WAC 173-308 and WAC 173-351-210(10) shall be reported to the Health District within ten (10) calendar days of the end of each quarter to include: source of sludge; date of disposal; and disposal volume (tons or cubic yards). Sewage sludge quarterly reports shall be accompanied with representative paint filter liquid test results.
 - b. Complaints received by the Permittee and the response(s) to the complaint will be recorded and copies sent to the Health District within ten (10) working days of receipt of the complaint and within ten (10) working days of responding to the complaint.
- 5.5 Annual Reports.** The Permittee shall submit annual reports for the previous calendar year to the Health District and the Department of Ecology by April 1 of each year, on forms supplied by the Department of Ecology or in a format approved by the Health District and other information as required by the Health District.
- 5.6 Permanent Posts.** The Permittee shall clearly mark the active area boundaries as authorized in the permit, with permanent posts or using equivalent method clearly visible for inspection purposes.
- 5.7 Leachate Evaporation Impoundment.** The Permittee may operate the existing leachate evaporation impoundment, as per the Plan of Operation and WAC 173-350-330 with special conditions as follows:
- a. The Closure/Post Closure Plan, financial assurance instrument, Engineering Plan, Engineering Report, and Plan of Operation must be revised to include any new leachate evaporation impoundment within sixty (60) days prior to construction.
 - b. When no longer required for the facility, the leachate evaporation impoundment will be closed, properly dismantled and properly disposed as per the approved Post-Closure Plan.
- 5.8 Cover Material.**
- a. Compacted waste will be covered fully with a minimum of six inches of compacted soil or alternate daily cover (ADC), after each day of operation. At least six inches of compacted soil will be applied at least every seventh calendar day when ADC is utilized.
 - b. ADC is allowed when conditions are appropriate according to the Plan of Operation. If the Health District has reason to believe continued use of ADC will create a risk to human health and the environment, it shall notify Permittee to cease by certified letter. Six inches of earthen material shall be applied to compacted waste when conditions prevent successful use of ADC.
- 5.9 Public Access Restrictions.** Limited public access and waste disposal is allowed for special cleanup events (i.e. Community Cleanup, and Litter Control Programs, and Residents of Rock Island).

- a. The Permittee shall provide signs when allowing public access to the landfill for disposal of solid waste and must conform with the provisions of permit Section II. The signs will include the following items at a minimum:
 - i. Hours and days of operation.
 - ii. Materials that will not be accepted for disposal.
 - iii. Location of emergency phone.
 - iv. Scavenging and salvaging is prohibited.
 - v. Children and pets remain inside vehicle.
 - vi. Caution – large equipment operating on access roads and unloading areas.
 - vii. Location of landfill recycling bins.
- b. Public access beyond limited public access will require revisions to the Plan of Operation and approval by the Chelan-Douglas Health District.

5.10 All operation and maintenance activities conducted at the facility shall be in conformance with the Plan of Operation which shall be updated and submitted to the Health District sixty (60) calendar days prior to proposed operational or structure changes occurring at the facility.

Section 6.0 Ground Water Monitoring Program and Hydrogeologic Report

- 6.1 Groundwater Standard.** The Permittee shall not allow the facility to exceed the maximum contaminant levels in ground water specified in this permit at the approved point(s) of compliance as defined by WAC 173-351-300 and the Environmental Monitoring Plan Greater Wenatchee Regional Landfill and Recycling Center. The Permittee shall also not cause exceedances of standards contained in chapter 173-200 WAC (Water Quality Standards for Ground Waters of the State of Washington) or Chapter 173-290 WAC (Drinking Water Regulations).
- 6.2 Hydrogeologic Report.** The hydrogeologic report, dated January 2007, is hereby approved.
- 6.3 Environmental Monitoring Program.** The Environmental Monitoring Plan (Appendix "H"), dated January 2007 and July 2007 revisions, is hereby approved.

Section 7.0. Quality Assurance and Quality Control. The Permittee shall perform all construction activities, including closure cap construction according to the construction quality assurance performed by an independent third party and quality control plan, dated January 2007, which is hereby approved.

Section 8.0. Closure and Post-Closure Plans. The Permittee shall perform closure and post-closure according to the latest approved closure and Post-Closure Plan, dated January 2007 and revisions dated July 2007 and September 2007, which are hereby approved. The Permittee shall review the Closure/Post-Closure Plan annually and submit revisions as needed, by October 15th of that year.

Section 9.0. Financial Assurance for Closure, Post-Closure and Corrective Action. The Permittee shall maintain financial instruments for Closure, Post-Closure and known corrective actions. The Trust Agreement and Letter of Credit are subject to the following specific condition:

- a. The financial assurance mechanism must be updated and adjusted annually by January 1st, of each year to equal third party costs for worse case closure and post-closure costs of the facility projected for the next twelve months.

Section 10.0 Other Specific Conditions.

- 10.1** Summary Compliance Schedule for existing leachate impoundment:
- a. Surface Impoundment Leakage response to include:
 - i. Plans for further evaluation of the impoundment liner integrity.
 - ii. Calculate leakage rate of top liner.
 - iii. Estimate of hole size.
 - iv. Calculation of sump volume and depth.
 - v. Repair plan as needed and determined by the District.
 - vi. Respond by December 1, 2008.
- 10.2** Reconstruction of MW-08A
- a. Conditions for well acceptance:
 - i. Reconstruction will be completed as per June 21, 2012 letter from Dave Lowe and June 18, 2012 letter from SCS Engineers, Louis Caruso, with figures.
 - ii. Both standard detection monitoring and NWTPH-Gx and Dx, SW846 8260 and SW846 8310 will be sampled after successful completion of well reconstruction and development.
 - iii. The District will determine the acceptability of the well after ground water analysis is completed and reviewed by the District.

Section 11.0. General Permit Processes

11.1 Transferability

- a. This permit issued pursuant to this regulation is transferable only upon prior written approval of the Health District and a demonstration that the prospective transferee will be able to comply with applicable laws and regulations, permit conditions, and other requirements to which the prospective transferor is subject. Upon approval, the permit shall be reviewed and re-issued.
- b. Upon transfer of ownership of all or part of the facility, a provision must be included in the property deed indicating the period of time during which the facility has been disposing of solid waste, a description of the solid waste contained within, and fact that the records for the facility have been filed with the Health District. The deed must reference a map, which must be filed with the county clerk, showing the limits of the active areas as defined in WAC 173-351-100.

11.2 Renewal

- a. The owner or operator of a facility shall apply for renewal of the facility's permit, except for that year that a permit has been or will be reissued under WAC 173-351-720(6).
- b. Renewal procedures. The owner or operator of a facility shall apply for renewal of this permit prior to expiration, except for the year that a permit has been or will be reissued. The owner or operator is authorized to continue all activities authorized under a currently expired permit, if the Health District has not rendered a decision on renewal by the renewal date of the current permit.

- 11.3 Reissuance.** Any owner or operator intending to continue construction, operation or post-closure beyond the permitted duration of a valid municipal solid waste landfill facility permit must file a reissuance application at least ninety (90) calendar days before the existing permit expires.

11.4 Modification

- a. Any Permittee intending to modify this permit must file a modification application at least thirty (30) calendar days before the intended modification. A modification application must be made on forms or in a format authorized by the Health District and the Department of Ecology.
- b. In order to allow for permit modifications to be authorized at the time of permit renewal, the Permittee may combine the application required for a permit modification with the application required for a renewal permit at the time of permit renewal.

11.5 Suspensions and Revocations. The Health District may revoke this permit if the facility is found in violation of chapter 70.95 RCW, chapter 173-350 WAC, 173-351 WAC or local ordinances governing solid waste disposal facilities.

11.6 Inspections. Employees of the Health District or its agents may enter upon, inspect, sample, and move freely about the premises of any municipal solid waste landfill facility unit after presentation of credentials.

Section 12.0 Appeals, Chelan-Douglas Health District Sanitary Code

- a. CDHDSC 1.04.080. Unless otherwise specified, all appeals of any decisions made by the District's Board of Health, or the District's Health Officer or its staff, including but not limited to the appeal by any person whose permit or application has been denied, suspended, or revoked by the district, shall be made to the District's Hearing Examiner as set forth in Chapter 2.12, as presently enacted or hereafter amended. Such appeal shall be in writing and shall be filed with the Hearing Examiner within ten (10) calendar days of the date of any decision rendered by the board, the Health Officer, or District staff. (Res. 2003-007 § 1: prior code Art. I § 11)
- b. Any party aggrieved by such decision may appeal to the Pollution Control Hearings Board by filing with the Hearings Board a notice of appeal within thirty (30) calendar days after receipt of notice of the determination of the Hearing Examiner decision.
- c. The Hearings Board shall hold a hearing in accordance with the provisions of the Administrative Procedure Act, chapter 34.05 RCW, as now or hereafter amended.

Section 13.0 Additional Standard Conditions

- 13.1 Engineering Plans.** The approved Engineering Plans must be revised as design and regulatory requirements change and sixty (60) calendar days prior to any applicable construction.
- 13.2 Engineering Report.** The approved Design Report must be revised as design and regulatory requirements change and at least sixty (60) calendar days prior to any applicable construction.
- 13.3 Amendments.** This permit may be amended by certified letter from the Health District Administrator or his/her authorized designee, at any time prior to its expiration date should circumstances or conditions arise which require immediate compliance for the protection of the public health, welfare or safety.
- 13.4 Permit Validity.** If any part, section, sentence or paragraph of this permit should be suspended by appropriate action of the Health District, or found invalid by a tribunal or court of competent jurisdiction, the remainder of this permit shall not be affected thereby.



Chemical Waste Management of the Northwest

Jorgensen Forge Draft TTD Work Plan 41 September 2013



HAZARDOUS WASTE PERMIT

FOR THE

STORAGE, TREATMENT, AND
DISPOSAL OF
HAZARDOUS WASTE



Issued in accordance with the applicable provisions of ORS Chapter 466 and the regulations promulgated at OAR Chapter 340 Divisions 100 through 120, and, the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the regulations promulgated at Title 40 of the Code of Federal Regulations as adopted into Oregon Rules by OAR 340-100-0002.

This Permit is effective as of August 21, 2006, and shall remain in effect until August 21, 2016, unless revoked and reissued (40 CFR §270.41), terminated (40 CFR §270.43), or continued in accordance with OAR 340-105-0051.

ISSUED TO:

Chemical Waste Management of the Northwest, Inc.
17629 Cedar Springs Lane
Arlington, OR 97812
Telephone: (541) 454-2643

ISSUED BY:

Lynn Hampton, Chair
Oregon Environmental Quality Commission

8/10/06

Date

Joni Hammond, Regional Administrator
Eastern Region

8-10-06

Date

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TABLE OF CONTENTS

Section Page

Signature Page	i	Table of
Contents	iii	Introduction
.....	v	List of Standalone
Documents	ix	Definitions
.....	xi	
I. Standard Conditions	I-1	
II. General Facility Conditions	II-1	
III. Container Storage	III-1	
IV. Tank Storage and Treatment	IV-1	
V. Surface Impoundment Storage and Treatment	V-1	
VI. Landfill Disposal	VI-1	
VII. Containment Building Storage and Treatment.....	VII-1	
VIII. Surface Water Management Plan.....	VIII-1	
IX. Past Practice Units	IX-3	
X. Groundwater Detection Monitoring Program	X-1	
XI. Groundwater Compliance Monitoring Program.....	XI-1	
XII. Corrective Action	XII-1	
XIII. Amendments to Standalone Documents	XIII-1	
XIV. PCB Disposal Permit.....	XIV-1	

40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued*

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INTRODUCTION

Permittee: Chemical Waste Management of the Northwest, Inc. Environmental Protection Agency

Identification Number: ORD 089 452 353

Pursuant to Oregon Revised Statutes Chapter 466 and the hazardous waste rules promulgated by the Oregon Environmental Quality Commission in Chapter 340 of the Oregon Administrative Rules (OAR), and, pursuant to the Solid Waste Disposal Act (42 U.S.C. 3251 et seq.), as amended by the Resource Conservation and Recovery Act of 1976 [42 U.S.C. 6901 et seq., (RCRA)] and the Hazardous and Solid Waste Amendments of 1984 (HSWA) and regulations promulgated by the U.S. Environmental Protection Agency (Agency) in Title 40 of the Code of Federal Regulations, this Permit is issued to Chemical Waste Management of the Northwest, Inc. (Permittee), to operate a hazardous waste treatment, storage, and disposal Facility located in Gilliam County near Arlington, Oregon, on Cedar Springs Road at latitude 45° 37' 30" and longitude 120° 22' 30".

The Permittee shall comply with all Terms and Conditions set forth in this Permit and with documents referenced in this Permit. Some of these documents are defined and referenced as "standalone documents", "referenced standalone documents", or shortened as "documents". The Permittee shall comply with all applicable state rules, including OAR 340 Divisions 100-120, and the rules of the Oregon Department of Transportation, the Oregon Department of Water Resources, the Workers' Compensation Department, the Oregon State Health Division, and other state agencies having jurisdiction over the Facility. Additionally, the Permittee shall comply with all applicable federal regulations in 40 CFR Parts 260 through 266, Part 268, and Part 270, as adopted by Oregon rule at OAR 340-100-0002.

In some cases, within the Permit and the referenced standalone documents, the Department has included references to other documents which are not physically

contained in this Permit or the referenced standalone documents. In such cases, the Permittee shall still comply with the procedures of those referenced documents, even though they are not physically contained in this Permit, to the extent necessary to remain in compliance with the conditions of this Permit and referenced standalone documents. The Permittee shall maintain a set of such referenced documents at the Facility.

The Department's issuance of this Permit is based upon the administrative record. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time, shall be grounds for the termination of this Permit and/or initiation of an enforcement action, including criminal proceedings. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in the permit application or in any report to the Department, the Permittee shall promptly submit such facts or corrected information to the appropriate persons.

The Department shall enforce all Conditions of this Permit. Other state agencies having jurisdiction over the Facility shall exclusively enforce the requirements of their rules. ‡

Rev. 1

The first RCRA hazardous waste permit for the Facility was originally issued on March 11, 1988, by the Oregon Environmental Quality Commission, the Oregon Department of Environmental Quality, and the U.S. Environmental Protection Agency. The Permittee submitted a Permit renewal Part A and B application in March 1998. The Department has reviewed the renewal application and issued a draft hazardous waste storage, treatment, and disposal Permit for public comment. The draft hazardous waste Permit was issued for comment on February 22, 2006. The final Permit decision will be made by the Environmental Quality Commission and the Department of Environmental Quality. See ORS 466.140, 466.145, and 466.015.

This Permit may be modified in accordance with 40 CFR 270.40 (as amended by OAR 340-105-0040), 40 CFR 270.41 (as amended by OAR 340-105-0041), and 40 CFR 270.42.

Issuance of this Permit shall terminate the hazardous waste permit issued in March 1988 and its subsequent modifications.

40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued*

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40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued*

LIST OF STANDALONE DOCUMENTS

The following documents are incorporated, in their entirety, by reference into this hazardous waste Permit. Their structure and most of the content comes from the Permittee's RCRA 1998 Permit renewal application and from previous Department approved modifications to the hazardous waste permit which was first issued in March 1988. In cases where there are inconsistencies between this Permit and a standalone document, the Permit supersedes the standalone document. In some cases, the Department has altered specific language in the standalone documents by adding Permit Conditions and/or changing language in the standalone documents. Alterations as described in the Permit Conditions found in this Permit supersedes the language of the standalone document. These incorporated documents, as modified by specific Permit Conditions are enforceable conditions of this Permit.

40 CFR
citations
adopted as
Oregon Rule
at OAR
340-100-0002
ef. 7/15/05
DEQ
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Activity	Risk	BMP
Placement of barges at TTD facility	1. Prop wash 2. Unnecessary turbidity 3. Damage to TTD facility dock and pilings	Transfer and placement of the barges at the TTD facility dock will be performed by the tug contractor using river current and minimum thrust so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbidity during movement of the barges
Movement of barges along TTD facility dock	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 4. Control of barges while moving.	Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care will be taken during barge movement to ensure no damage is caused to the TTD facility dock or pilings. Barges will remain tied to the dock with a minimum of one dock line during fleeting operations. At no time will barges be released and moved away from the dock to facilitate placement of another barge along the dock, unless the barge is under the control of the tug contractor.
Unloading of dredge material from barges at TTD facility	1. Spill or dripping dredge material on dock 2. Dredge material introduced into site storm water system 3. Spill of dredge material into the river	6-mil poly sheeting will be placed under travel area of the overhead crane and clamshell bucket to capture any drips or dredge material the may fall from the clamshell during transfer of dredge material to containment vault. Dredge material transfer operations will be isolated from the remainder of the facility storm water management system. No storm water or water resulting from cleaning the exterior of haul

Activity	Risk	BMP
Placement of barges at TTD facility	1. Prop wash 2. Unnecessary turbidity 3. Damage to TTD facility dock and pilings	Transfer and placement of the barges at the TTD facility dock will be performed by the tug contractor using river current and minimum thrust so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbidity during movement of the barges
Movement of barges along TTD facility dock	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 4. Control of barges while moving.	Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care will be taken during barge movement to ensure no damage is caused to the TTD facility dock or pilings. Barges will remain tied to the dock with a minimum of one dock line during fleeting operations. At no time will barges be released and moved away from the dock to facilitate placement of another barge along the dock, unless the barge is under the control of the tug contractor.
Unloading of dredge material from barges at TTD facility	1. Spill or dripping dredge material on dock 2. Dredge material introduced into site storm water system 3. Spill of dredge material into the river	6-mil poly sheeting will be placed under travel area of the overhead crane and clamshell bucket to capture any drips or dredge material the may fall from the clamshell during transfer of dredge material to containment vault. Dredge material transfer operations will be isolated from the remainder of the facility storm water management system. No storm water or water resulting from cleaning the exterior of haul vehicles will be managed through the on-site WWT facility. In the unlikely event dredge materials were
ADJACENT PROPERTY OWNERS: Chemithon Alaska Marine Port of Seattle	Lafarge North America SITE LOCATION ADDRESS: 5400 West Marginal Way SW Seattle, Washington 98106	IN: Section 19; Township 24N; Range 4E COUNTY: King STATE: WA

Standalone Document 1
Standalone Document 2
Standalone Document 3
Standalone Document 4
Standalone Document 5
Standalone Document 6
Standalone Document 7
Standalone Document 8

Waste Analysis Plan, administrative record no. 06074.

Security Procedures, Hazard Prevention, Training Plan, administrative record no. 06075.

Inspection Plan, administrative record no. 06076.

Contingency Plan, administrative record no. 06077.

Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance, administrative record no. 06078.

Surface Water Management Plan, administrative record no. 06079.

Groundwater Monitoring Plan, administrative record no. 06080.

Bulk Liquid Storage/Treatment Plan, administrative record no. 06081

Document 19Bioremediation Facility and Organic Recovery Unit Design and Operations Plan,
administrative record no. 06092. ‡ **Rev. 12**

40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued*

DEFINITIONS

For this hazardous waste Permit, the following definitions shall apply:

- a. The term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency (EPA) or a designated representative. The Director, Office of Air, Waste, and Toxics, EPA Region 10, is a duly authorized and designated representative of the Administrator for purposes of this Permit.
- b. The term "Agency" shall mean the United States EPA Region 10.
- c. The abbreviation "A.R. (no.)" shall mean the administrative record index number for a specific document.
- d. The term "Commission" shall mean the Oregon Environmental Quality Commission.
- e. The term "daily" shall mean only those days which the Permittee considers to be regular workdays which shall include Monday through Friday excluding holidays. In the event of a full temporary facility shutdown or a holiday combined with extra days, no more than 72 hours shall elapse between inspections listed at a frequency of "normal working day" or "daily." For partial temporary shutdown where employees do arrive at the facility and can perform duties in accordance with the Permit, such duties shall be performed during partial temporary shutdown.
- f. The term "Department" shall mean the Oregon Department of Environmental Quality (DEQ).
- g. The term "Director" shall mean the Director of the Oregon Department of Environmental Quality or a designated representative. By Department delegation all notifications and approvals assigned to the Director are delegated to the Eastern Region Hazardous Waste Program Manager ("Manager").
- h. The term "Eastern Region Clean-up Manager" shall mean the Manager implementing the authority of ORS 465 in the Department's Eastern Region.
- i. The terms "Facility" or "Site" shall mean the legal description of the Chemical Waste Management of the Northwest, Inc., property (including structures, appurtenances, and improvements) used to store, to treat or to dispose hazardous waste as authorized by this Permit. For purposes of Permit Condition I.N., "permitted Facility" shall also include significant physical alterations not otherwise detailed in this Permit.
- j. The term "Inspector" shall mean the designated representative of the "Manager" delegated to routine Facility oversight.

k. The term “Manager” shall mean the Manager of the DEQ Eastern Region Hazardous Waste Program.

l. The term "Permit" shall mean the Permit issued by the Commission and the Department pursuant to ORS 340 Divisions 105 and 106.

m. The term “standalone document” or “referenced standalone document” shall mean those documents listed in the List of Standalone Documents in this Permit.

n. The term “within [x] days of the effective date of this Permit” shall mean within [x] calendar days after the effective date of this Permit. If the date within [x] amount of days after the effective date of this Permit falls on a weekend or holiday, the

40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued* 40 CFR citations adopted as Oregon Rule at OAR 340-100-0002
ef. 7/15/05 *DEQ Issued*

time shall automatically be extended until the following regular workday.

o. In cases where the Permittee is required to comply with a specific provision of 40 CFR Part 264 and that provision refers to "Regional Administrator" or "Director", the term "Regional Administrator" or "Director" shall be interpreted to mean the Manager, Eastern Region Hazardous Waste Program.

p. All definitions contained in 40 CFR Parts 260 through 270, and, OAR 340 Divisions 100 through 106 and 120 are hereby incorporated, in their entirety, by reference into this Permit, except that any of the definitions used above, (a) through (o), supersede any definition of the same term in 40 CFR 260.10, 270.2, 264.141, and OAR 340-100-0010. Where a term is not defined in the Permit, regulations or rules, the term is defined according to the standard dictionary definition or the generally accepted scientific or industrial meaning of the term.

40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued*

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I. STANDARD CONDITIONS

I.A. Effect of Permit

The Permittee is authorized to store, treat, and dispose hazardous waste in accordance with the Conditions of this Permit and in accordance with 40 CFR 262.34. Any storage, treatment, or disposal of hazardous waste by the Permittee at this Facility that is not authorized by this Permit or by 40 CFR 262.34, and for which a Permit is required under Section 3005 of RCRA and ORS 466.095 and 466.100 is prohibited.

I.B. Personal and Property Rights

This Permit does not convey any property rights of any sort, or any exclusive privilege, nor does this Permit authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local laws or regulations.

I.C. Permit Actions

I.C.1. This Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, 270.43 and OAR 340 Divisions 105 and 106. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [40 CFR 270.30(f)]

I.C.2. Except as provided by specific language in this Permit, any modification or change in design or operation of this Facility or in a hazardous waste management practice covered by the Permit shall be done in accordance with 40 CFR 270.41 and 270.42, unless a change in accordance with Permit Condition II.R. is appropriate.

I.C.3. [Reserved]

I.D. Severability

I.D.1. The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. Invalidation of any state or federal statutory or regulatory provision, which forms the basis for any Condition of this Permit, does not affect the validity of any other state or federal statutory or regulatory basis for said Condition.

I.D.2. In the event that a condition of this Permit is stayed for any reason, the Permittee shall continue to comply with the related applicable and relevant conditions in the previously-expired permit until final resolution of the stayed condition unless compliance with the related applicable and relevant conditions in the previously-expired permit would be technologically incompatible with compliance with other Conditions of this Permit, which have not been stayed.

I.E. Duty to Comply

I.E.1. The Permittee shall comply with all Conditions of this Permit, except that the Permittee need not comply with the Conditions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency Permit [issued under 40 CFR 270.61, OAR 340-105-0061, or ORS 466.095(3)]. Any Permit noncompliance, except under the terms of an emergency Permit, constitutes a violation of the applicable provision of Oregon State law and/or RCRA, as amended by HSWA, and is grounds for enforcement action, Permit termination, modification or revocation and reissuance of the Permit, or denial of a Permit renewal application.

I.E.2. Compliance with the terms of the Permit does not constitute a defense to any action brought under ORS 466.180, 466.185, 466.190, 466.200, 466.210, 466.225, or 465, or Sections 3007, 3008, 3013 and 7003 of RCRA (42 U.S.C. 6934 and 6973), Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. 9606(a)], as amended by the Superfund Amendments and Reauthorization Act of 1986, or any other federal or state law governing protection of public health or the environment from any imminent and substantial endangerment to human health or the environment. Specific exclusions from compliance with this Permit are found at 40 CFR 270.4.

However, compliance with the terms of this Permit does constitute a defense to any action alleging failure to comply with the applicable law upon which this Permit is based.

‡ Rev. 3

I.F. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new permit, in accordance with 40 CFR 270.30(b). The Permittee shall submit such permit application at least 180 calendar days prior to the expiration date of this Permit, unless the Manager has granted permission for a later date (but no later than the expiration date of the existing Permit) in accordance with 40 CFR 270.10(h).

I.G. Continuation of Expiring Permit

This Permit, all Conditions herein and the standalone documents shall continue in force until the effective date of a new Permit if the Permittee has submitted a timely, complete application (under 40 CFR 270 Subpart B and OAR Chapter 340 Division 105), and, through no fault of the Permittee, the Manager, the Administrator, or the Commission does not issue a new Permit under 40 CFR 124.15 on or before the expiration date of

the previous Permit. In accordance with 40 CFR 270.50, this Permit shall be reviewed five years after the effective date and modified, as necessary, in accordance with 40 CFR 270.41.

I.H. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the Conditions of this Permit.

I.I. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

I.J. Proper Operation and Maintenance

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee so as to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This Condition requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the Conditions of this Permit.

I.K. Duty to Provide Information

The Permittee shall furnish to the Manager or his designee, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Manager and Inspector, upon request, copies of records required to be kept by this Permit.

I.L. Inspection and Entry

The Permittee shall allow the Department, or its authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

I.L.1. Enter at reasonable times upon the Permittee's premises where regulated hazardous or solid waste management units or activities are located or conducted, or where records must be kept under the Conditions of this Permit;

I.L.2. Have access to and copy, at reasonable times, any records that must be kept under the Conditions of this Permit;

I.L.3. Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

I.L.4. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA or Oregon Law, any substances or parameters at any location.

I.M. Monitoring and Records

I.M.1. Samples and measurements taken by the Permittee for the purpose of monitoring shall be representative of the monitored activity. The Permittee may request to substitute analytical methods which are equivalent to those specifically approved for use in this Permit by meeting the following:

I.M.1.a. The Permittee may submit to the Manager a request for a substitution of an analytical method(s) that is equivalent to the method(s) specifically approved for use in this Permit. The request shall provide information demonstrating that the proposed method(s) is equal or superior to the approved analytical method(s) in terms of sensitivity, accuracy, and precision (i.e., reproducibility); and

I.M.1.b. The Manager notifies the Permittee in writing that the substitution of the analytical method(s) is approved. Such approved substitution of an analytical method(s) shall not require a permit modification.

I.M.2. The Permittee shall retain records of all monitoring information, (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this Permit, the certification required by 40 CFR 264.73(b)(9), and records of all data used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report, certification, or recording unless a longer retention period for certain information is required by other Conditions of this Permit. This three year period may be extended by the Manager at any time by notification, in writing, to the Permittee. The Permittee shall maintain records from all groundwater monitoring wells

and associated groundwater surface elevations for the active life of the Facility and, for disposal units, for the post-closure care period as well.

I.M.3. Records of monitoring information shall include:

I.M.3.a. The date, exact place, and time of sampling or measurements;

I.M.3.b. The name, title, and affiliation of the individual(s) who performed the sampling or measurements;

I.M.3.c. The date(s) analyses were performed;

I.M.3.d. The name, title, and affiliation of the individual(s) who performed the analyses;

I.M.3.e. The analytical techniques or methods used; and

I.M.3.f. The results of such analyses.

I.N. Reporting Planned Changes

The Permittee shall give notice to the Manager, as soon as possible of any planned physical alterations or additions to the permitted Facility.

I.O. Certification of Construction or Modification

The Permittee may not commence storage, treatment, or disposal in a new hazardous waste management unit or in a modified portion of an existing unit until:

I.O.1. The Permittee has submitted to the Manager by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the hazardous waste management unit has been constructed or modified in compliance with this Permit; and

I.O.2.a. The Inspector has inspected the modified or newly constructed hazardous waste management unit and has notified the Permittee in writing that he finds it is in compliance with the Conditions of this Permit; or

I.O.2.b. Within 15 days of the date of submission of the letter in Permit Condition I.O.1., the Permittee has not received notice from the Manager by letter, by certified mail or hand delivery, of his or her intent to inspect, prior inspection is waived and the Permittee may commence treatment, storage, or disposal of hazardous waste.

I.P. Anticipated Noncompliance

The Permittee shall give advance notice to the Manager of any planned changes in the Permitted Facility or activity that might result in noncompliance with Permit requirements.

I.Q. Transfer of Permit

This Permit is issued and is personal to the Permittee and is transferable only in accordance with 40 CFR 270.40 and OAR 340-105-0040(2).

I.R. Monitoring Reports

The Permittee shall report monitoring results to the Manager at the intervals required in specific Conditions of this Permit.

I.S. Compliance Schedules

The Permittee shall submit reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule required by specific Conditions of this Permit to the Manager no later than 14 calendar days following each schedule date.

I.T. Twenty-Four Hour Reporting

I.T.1. The Permittee shall verbally report to the Manager or Inspector, any noncompliance with this Permit which may endanger health or the environment, within 24 hours from the time the Permittee becomes aware of the noncompliance. ‡ **Rev. 3** The report shall include: [OAR 340-105-0030(2)(b)]

I.T.1.a. Information concerning release of any hazardous waste that might cause an endangerment to public drinking water supplies; and,

I.T.1.b. Any information of a release or discharge of hazardous waste or of a fire or explosion from the hazardous waste management facility that might threaten human health or the environment.

I.T.2. The description of the occurrence and its cause shall include:

I.T.2.a. Name, address, and telephone number of the owner or operator;

I.T.2.b. Name, address, and telephone number of the Facility;

I.T.2.c. Date, time, and type of incident;

I.T.2.d. Name and quantity of material (s) involved;

I.T.2.e. The extent of injuries, if any;

I.T.2.f. An assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable; and,

I.T.2.g. Estimated quantity and disposition of recovered material that resulted from the incident.

I.T.3. Within 5 calendar days of the time the Permittee becomes aware of noncompliance that may endanger human health or the environment, the Permittee shall provide to the Manager a written submission. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; the anticipated time noncompliance is expected to continue if the noncompliance has not been corrected; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Manager may waive the five-day written notice requirement in favor of a written report within fifteen days.

I.U. Other Noncompliance

The Permittee shall report to the Manager all other instances of noncompliance not reported under Conditions I.R., I.S., and I.T. of this Permit, by March 1 of the following year. This report shall contain the applicable information listed in Condition I.T. of this Permit.

I.V. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the Permit application, or submitted incorrect information in the Permit application or in any report to the Manager or Inspector, the Permittee shall promptly submit such facts or corrected information to the appropriate persons.

I.W. Signature and Certification

All applications, reports required by the Permit and other information requested by the Manager, when submitted to the Manager, or Inspector, by the Permittee shall be signed and certified in accordance with 40 CFR 270.11.

I.X. Confidential Information

Information submitted by the Permittee to the Manager or Inspector that is claimed as trade secret, confidential, or confidential business information by the Permittee will be handled in accordance with the applicable provisions of OAR 340-100-0003.

I.Y. Fees

The Permittee shall pay fees as required under ORS 466.160, 466.165, and promulgated at OAR 340-105, and other state statutes and related rules. This Condition does not preclude the Permittee from challenging any future promulgation or adoption of a statute, rule, or administrative action imposing any fee on the Permittee.

40 CFR citations adopted as Oregon Rule at OAR 340-100-0002 ef. 7/15/05 *DEQ Issued*

II. GENERAL FACILITY CONDITIONS

II.A. Design and Operations of Facility

II.A.1. The Permittee shall design, construct, maintain, and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.

II.A.2. The Permittee shall construct all future hazardous waste management units in accordance with the approved designs and specifications that are included in the standalone documents of this Permit, except for minor changes deemed necessary by the Permittee to facilitate proper construction of the units. Minor deviations from the approved designs or specifications necessary to accommodate proper construction shall be noted on the as-built drawings, and the rationale for those deviations shall be provided in narrative form. After completion of construction of each future waste management unit, the Permittee shall submit final as-built drawings and the narrative report to the Manager as part of the construction certification document specified in Permit Condition I.O.1.

II.B. Required Notices

II.B.1. The Permittee shall notify the Inspector in writing at least four weeks in advance of the date hazardous waste from a foreign source is expected to arrive at the Facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

II.B.2. When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), the Permittee shall inform the generator in writing that it has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The Permittee shall keep a copy of this written notice as part of the operating record in accordance with 40 CFR 264.73(b)(7).

II.C. General Waste Analysis

II.C.1. The Permittee shall follow the procedures as stated in Standalone Document No. 1, Waste Analysis Plan. [40 CFR 264.13]

II.C.2. The Permittee shall follow the requirements of 40 CFR 268.7(b), (c), (d) and (e).

II.C.3. In storing hazardous waste in a storage unit, treating hazardous waste in a treatment unit, or placing hazardous waste in a land disposal unit, the Permittee is responsible for meeting the requirements of 40 CFR 268.

II.C.4. In addition to the appropriate reporting of noncompliance under Permit Condition I.T. or I.U, upon discovery by the Permittee, or Department notification to the Permittee, that the procedures and tasks in the Waste Analysis Plan (Standalone Document No. 1) failed to characterize adequately a hazardous waste and, as a result, did not designate the proper storage, treatment, or disposal of the hazardous waste, the Permittee shall submit a report to the Department within 45 days of the discovery or notification evaluating the Waste Analysis Plan and explaining why the failure occurred.

II.C.5. The Permittee may accept hazardous and non-hazardous wastes that are (1) containerized liquid corrosive wastes, (2) bulk liquid corrosive wastes, (3) containerized liquid ignitable and organic wastes, (4) bulk liquid ignitable and organic wastes, (5) containerized and bulk liquid reactive wastes, (6) all containerized liquid wastes not included in (1) through (5), including pesticide wastes plus every combination, (7) all bulk liquid wastes not included in (1) through (6) including pesticide wastes plus every combination, (8) bulk or containerized solid wastes including lab packs such as filter cakes and spill and site cleanup residue, (9) semi-solid or sludge wastes, (10) PCB contaminated wastes greater than or equal to 50 ppm, and (11) compressed gases.

II.C.5.a.i. The Permittee may accept: Recoverable Organic Wastes limited to: Petroleum hydrocarbon wastes, spent non-halogenated solvents, spent halogenated solvents, commercial chemical products, off-specification species, process residues, and spill residues.

II.C.5.a.ii. The Permittee may accept: Inorganic wastes limited to: Corrosive wastes, toxicity characteristic wastes, primary and secondary metals wastes (non-reactive), electroplating wastes (non-reactive) soils, sludge, debris, inorganic pigments, aqueous wastes (non-reactive) asbestos and asbestos containing material (RCRA regulated wastes), commercial chemical products, off-specification species, process residues, and spill residues.

II.C.5.a.iii. The Permittee may accept: Reactive Wastes limited to: Water reactive solid wastes, commercial chemical products, off-specification species, process residues, and spill residues.

II.C.5.a.iv. The Permittee may accept: Non-recoverable Organic Hazardous Wastes limited to: soils, sludges, debris, toxicity characteristics wastes, organic acids and bases, wood products wastes, pesticide wastes, petroleum/refining wastes, aqueous wastes (nonreactive), commercial chemical products, off-specification species, process residues and spill residues.

II.C.5.a.v. The Permittee may accept: State-only hazardous waste containing a three percent or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(e); State-only hazardous waste containing a ten percent or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(f); spill cleanup residue, soil, water or other debris containing any amount of state-only hazardous wastes; blister agent and nerve agents materials approved for disposal from the Umatilla Army Depot; designated state-only hazardous waste numbers P998 and P999, respectively; residues from the demilitarization, treatment, and testing of blister and nerve agents designated state-only hazardous waste numbers F998 and F999, respectively; PCB containing materials regulated under OAR 340-110; solid wastes defined by ORS 459.005 and/or OAR 340-93-0030 including cleanup materials contaminated by hazardous substances, commercial solid waste, construction and demolition waste, industrial solid waste, leachate, sludge, woodwaste, and asbestos and asbestos-containing material; and pesticide wastes managed under OAR 340-1090010.

II.C.5.b.i. The Permittee may not accept at the Facility for treatment or disposal the following hazardous wastes: K013, K027, K044, K045, K047, P006, P009, P031, P033, P056, P063, P065, P076, P078, P081, P095, P096, P111, P112, P122, U020, U023, U033, U096, U115, U117, U124, U125, U133, U135, U160, U162, U169, U171, U189, U205, U213, U223, and U234. However, the Permittee may accept the above-listed hazardous wastes for treatment or disposal if they are residues from the treatment of

these wastes and handled in accordance with the Conditions of this Permit. Also, the Permittee may accept the above-listed hazardous wastes for treatment or disposal if they meet the definition of hazardous debris at 40 CFR 268.2. The Permittee may accept for storage, treatment and disposal all soils that are or were hazardous wastes and are subject to the alternative land disposal restrictions treatment standards in 40 CFR 268.49.

II.C.5.b.ii. The Permittee may not store the following hazardous waste compressed gasses: P009, P031, P033, P056, P063, P076, P078, P095, P096, and U135.

II.C.6.a. For new hazardous waste codes the Permittee wants to manage at the Facility, which are promulgated after the effective date of this Permit but have been previously been managed at the facility, the Permittee shall submit a permit modification in accordance with 40 CFR 270.42(g).

II.C.6.b. For new hazardous waste codes that have been promulgated after this Permit is issued and have not been previously managed at the Facility, the Permittee shall submit a permit modification in accordance with that table found in Appendix I of 40 CFR 270.42.

II.C.7. ‡ **Rev. 7**

II.D. Security Procedures

The Permittee shall comply with the security procedures in Standalone Document No. 2, Security Procedures, Hazard Prevention, Training Plan [A.R. 06075].

II.E. Inspection Plan

II.E.1. The Permittee shall follow the procedures in Standalone Document No. 3, Inspection Plan [A.R. 06076].

II.E.2. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Inspection reports shall be recorded and maintained as required by 40 CFR 264.15(d).

II.E.3. The Permittee shall maintain a copy of the latest approved Inspection Plan [A.R. 06076] at the Facility until the Facility is fully closed and certified.

II.F. Training Plan

II.F.1. The Permittee shall train all personnel who handle hazardous waste in hazardous waste management, safety and emergency procedures, as applicable to their job description, in accordance with Standalone Document No. 2, Security Procedures, Hazard Prevention, Training Plan [A.R. 06075]. These personnel shall be trained in accordance with the Training Plan and documentation of training shall be maintained as specified in the Training Plan.

II.F.2. The Permittee shall maintain a copy of the latest approved Security Procedures, Hazard Prevention, Training Plan [A.R. 06075] at the Facility until the Facility is fully closed and certified closed.

II.G. Hazards Prevention

The Permittee shall follow the hazards prevention procedures in Standalone Document No. 2, Security Procedures, Hazards Prevention, Training Plan [A.R. 06075].

II.H. Contingency Plan

The Permittee shall follow the contingency procedures in Standalone Document No. 4, Contingency Plan [A.R. 06077].

II.I. Manifest System, Recordkeeping, and Reporting

II.I.1.a. The Permittee shall follow the procedures for using the manifest system and identifying and resolving significant manifest discrepancies in accordance with 40 CFR 264.71, 264.72, and 270.30(l)(7) and Standalone Document No. 1, Waste Analysis Plan [A.R. 06074].

II.I.1.b. The Permittee shall submit an unmanifested waste report to the Manager, in accordance with 40 CFR 264.76 and 270.30(l)(8), within fifteen calendar days of receipt of unmanifested waste.

II.I.2. The Permittee shall maintain a written operating record at the Facility in accordance with 40 CFR 264.73(a) for all records identified in 40 CFR 264.73(b)(1) through (b)(17).

II.I.3. The Permittee shall retain all hazardous waste management records, including data collected in accordance with procedures of the Response Action Plans, and make such records available, at reasonable times, for inspection to the Inspector, in accordance with 40 CFR 264.74(a).

II.I.4. The retention period for all records required by this Permit is extended automatically during the course of any unresolved enforcement action regarding the Facility or as directed by the Manager, in accordance with 40 CFR 264.74(b).

II.I.5.a. The Permittee shall submit a survey plat indicating the location and dimensions of landfill units or other hazardous waste disposal units in accordance with 40 CFR 264.116 to the local land use authority and to the Department by the date of submission of certification of closure of each landfill unit at the Facility.

II.I.5.b. The Permittee shall submit post-closure notices to the local land use authority and to the Department in accordance with 40 CFR 264.119(a).

II.I.6. The Permittee shall submit a monthly hazardous waste management record to the Manager in accordance with OAR 340-105-0120(7). The Permittee shall submit an annual report covering Facility activities to the Manager in accordance with OAR 340-104-0075(3).

II.I.7. The Permittee shall submit additional reports to the Manager, in accordance with 40 CFR 264.77 as required by 40 CFR Part 264 Subparts F, K through N, AA, BB, and CC.

II.I.8. All reports, notifications, applications, or other materials required to be submitted to the USEPA shall be submitted to the Director, Office of Air, Waste and Toxics at EPA Region 10 in Seattle, WA.

II.J. Closure

II.J.1. The Permittee shall meet the general closure performance standard in 40 CFR 264.111 during closure of all hazardous waste management units and the Facility. Compliance with 40 CFR 264.111 shall require closure of each hazardous waste management unit in accordance with the Standalone Document No. 5, Closure/Post-Closure Plan Cost Estimates, Financial Assurance, Insurance [A.R. 06078].

II.J.2. Final cover design for landfill units L-12, L-13, and L-14 shall be as specified in Closure Cover Design Details in Standalone Document No. 17, Landfill Final Cover Design Plan [A.R. 06090], and landfill units L-12, L-13, and L-14 shall be capped in accordance with Standalone Document No. 17, Landfill Final Cover Design Plan [A.R. 06090].

II.J.3. For all landfill units and other hazardous waste management units to be closed as landfills, minor deviations from the Permitted closure designs, specifications, or procedures necessary to accommodate proper closure shall be noted on the as-built drawings and the rationale for those deviations in designs, specifications, or procedures shall be provided in narrative form with the closure certification statements. Such minor

deviations shall not be considered modifications of the Permit. ‡ **Rev. 3** Within 60 calendar days after completion of the closure of each landfill unit and other hazardous waste management units closed as landfills, the Permittee shall submit the final as-built drawings of the closed unit, the narrative report and the certification statements to the Manager.

II.J.4. For all hazardous waste management units other than units closed as landfills, minor deviations from the Permitted closure procedures necessary to accommodate proper closure shall be described in a narrative form with the closure certification statements. Such minor deviations shall not be considered modifications of the Permit. The Permittee shall describe the rationale for implementing minor deviations as part of this narrative report. Within 60 calendar days after completion of closure of each hazardous waste management unit, other than landfill units and units closed as landfills, the Permittee shall submit the certification statements and narrative report to the Manager.

II.J.5. The Permittee shall amend the Closure Plan when required in accordance with 40 CFR 264.112(c).

II.J.6. The Permittee shall notify the Manager at least 60 calendar days prior to the date it expects to begin closure of any surface impoundment or landfill unit and at least 45 calendar days prior to the date it expects to begin closure of any tanks, container storage unit, or containment building.

II.J.7. For closure at all hazardous waste units, the Permittee shall submit a task-specific/unit-specific closure work plan to the Department no less than 30 days before the Permittee begins closure activities at the specific unit. The Department shall review the work plan for conformity with this Permit and issue an approval to proceed. ‡ **Rev. 1**

II.J.8. The Permittee shall decontaminate or dispose of all Facility equipment as specified in the Closure Plan.

II.J.9. The Permittee shall provide certification statements that each unit at the Facility has been closed in accordance with the applicable specifications in the Closure Plan, in accordance with 40 CFR 264.115.

II.J.10 [Reserved]

II.J.11. The Permittee shall follow the soil sampling procedures and analysis outlined in Appendix A of Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078]. The Permittee shall modify the sampling grid procedure, as appropriate and necessary, when sampling soils at or near the perimeter of buildings and concrete structures, or in similar situations. Such change shall not require a permit modification. The Permittee shall document the change in the closure report submitted to the Manager in accordance with Permit Condition II.J.3.

II.J.12. In the event that any hazardous waste management unit, other than a landfill unit, cannot be "clean closed" by removing hazardous waste, hazardous constituents and contaminated subsoil as specified in section II.J. of this Permit, the Permittee shall revise the Facility post-closure plan to include a post-closure plan for that unit. The Permittee shall submit the post-closure plan for that unit to the Manager, as a Permit modification request, within 90 calendar days of the date that the Manager notifies the Permittee, in writing, that the unit shall be closed as a landfill, in accordance with 40 CFR 264.118(a).

Other Closure Conditions

II.J.13.a. [Reserved]

II.J.13.b. Regardless of any Permit Condition found in a standalone document or this Permit, at closure for surface impoundments P-A and P-B, the Permittee shall either: (1) Remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 40 CFR 261.3(d) applies, or (2) appropriately modify this Permit and allow P-A and P-B to operate and eventually close as a landfill. [OAR 340-104-0228]

II.J.13.c. Regardless of any Permit Condition found in a standalone document or this Permit, requests for variance and stated timelines in Standalone Document No. 5, Closure/Post-Closure Plans, Costs Estimates, Financial Assurance, Insurance [A.R. 06078] allowed for closure for all units are hereby not approved. The Permittee shall follow the closure time frames set forth in 40 CFR 264.113 unless another time frame is approved by permit modification.

II.J.13.d. The Permittee shall upon final closure of the Facility remove all Facility hazardous waste structures (e.g., tanks, storage units, etc.), and all Facility unused buildings, nonhazardous structures, and equipment and restore, to the extent reasonably practicable, the site to its original condition. However, the Permittee may at any time submit in writing a request for a modification to Standalone Document No. 5, Closure/Post-Closure Plans [A.R. 06078] for any structure, building or equipment the Permittee determines it desires to leave standing after the final Facility closure. In the request for a modification, the Permittee shall identify a use for any structure, building or equipment to remain standing upon final closure of the Facility. Upon Department written approval of the modification, Permittee may leave the structure, building or equipment standing upon final closure of the Facility. The closure/post-closure costs for all Facility hazardous waste structures (e.g., tanks, storage units, etc.) and all Facility unused buildings, non-hazardous structures, and equipment shall use the estimated costs to

sample and, if needed, decontaminate the structure, building or equipment. [ORS 466.150(5)]

‡ **Rev. 10**

II.J.13.e.

(removed ‡ **Rev. 21**)

II.J.13.e.i.

(removed ‡ **Rev. 21**)

II.J.13.g. Upon commencement of the end of the post -closure period, the Permittee shall negotiate in good faith and enter with the Department an Access Agreement under reasonable terms that will allow the Department to enter the Facility when necessary to carry out actions authorized by ORS 466.095 through 466.225.

II.K. Cost Estimate for Facility Closure

II.K.1. The Permittee shall comply with the requirements of 40 CFR 264.142(a). The Permittee shall maintain a current closure cost estimate for each individual waste management unit. These costs shall be summarized, by the Permittee, for final closure of the entire Facility.

II.K.2. The Permittee shall adjust the closure cost estimate for inflation on an annual basis, in accordance with 40 CFR 264.142(b).

II.K.3. During the active life of the Facility, the Permittee shall submit a revised closure cost estimate to the Manager within 30 calendar days of an approved modification to the closure plan, if such modification results in an increase in the closure cost estimate, in accordance with 40 CFR 264.142(c).

II.K.4. During the operating life of the Facility, the Permittee shall keep at the Facility a copy of the latest closure cost estimate and, when this estimate has been adjusted in accordance with 40 CFR 264.142(b), the latest adjusted closure cost estimate in accordance with 40 CFR 264.142(d).

II.K.5. The Permittee shall maintain an updated summary of current closure costs for the entire Facility closure based on the waste management units that have received RCRA waste, but have not yet been certified as closed and have not been released from the financial assurance requirements as specified in Permit Condition II.N., (i.e., active units).

II.K.6. Prior to placement of hazardous waste in any new hazardous waste management unit, the Permittee shall amend, as necessary, the summary of current closure costs to reflect the estimated closure cost of that new unit. Such amended closure costs shall be annually adjusted for inflation, as required by 40 CFR 264.142(b). [See Permit Condition II.N.2.].

II.K.7. Upon closure certification of any hazardous waste management unit, in accordance with 40 CFR 264.115, and after the Manager has released the Permittee from the financial assurance requirements for that unit as specified in Permit Condition II.N., the Permittee may adjust the summary of current closure costs to reflect the closure cost of that unit. Along with the closure certification statement for a closed unit, the Permittee shall

submit the current version of the closure cost estimate for the Facility, indicating cost estimates for each remaining unit to be closed, to the Manager.

II.L. Post-Closure Care

II.L.1. The Permittee shall comply with Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimate, Financial Assurance, Insurance [A.R. 06078]. In addition, the Permittee shall comply with 40 CFR 264.117, 264.118, 264.119, and 264.120.

II.L.2. The period of post-closure care for each closed landfill unit shall end after 30 years from the effective date of this permit renewal. Units that have not closed by the date of this permit renewal shall have a 30 year post-closure period commencing upon the certified closure date of the unit.

II.L.3. As part of the post closure certification sent in accordance with 40 CFR 264.120, the

Permittee shall submit to the Department a report which includes a determination of future use, or abandonment of, groundwater monitoring wells at the Facility in accordance with OAR 690-240.

II.M. Cost Estimate for Post-Closure Care

II.M.1. The Permittee shall comply with 40 CFR 264.144(a). The Permittee shall maintain a current post-closure cost estimate for each post-closure activity.

II.M.2. The Permittee shall adjust the post-closure cost estimate for inflation on an annual basis, in accordance with 40 CFR 264.144(b).

II.M.3. During the active life of the Facility, the Permittee shall submit a revised post-closure cost estimate to the Manager within 30 calendar days of an approved modification to the post-closure plan, if such modification results in an increase in the post-closure cost estimate, in accordance with 40 CFR 264.144(c).

II.M.4. During the operating life of the Facility, the Permittee shall keep at the Facility a copy of the latest post-closure cost estimate and, when this estimate has been adjusted in accordance with 40 CFR 264.144(b), the latest adjusted post-closure cost estimate in accordance with 40 CFR 264.144(d).

II.M.5. [Reserved]

II.M.6. [Removed]

‡ **Rev. 1, 5**

II.N. Financial Assurance for Facility Closure

II.N.1. The Permittee shall comply with 40 CFR 264.143, as amended by OAR 340-104-0143 or 40 CFR 264.146, by providing documentation of financial assurance, as required by 40 CFR 264.151, as amended by OAR 340-104-0151, in the amount of the cost estimates required by Permit Condition II.K.1.

II.N.2. Prior to placement of hazardous waste in any new hazardous waste management unit, the Permittee shall update the closure financial assurance mechanism, as necessary, so that an adequately funded financial assurance mechanism for closure of the Facility, including the new unit, is in effect. A copy of the updated financial assurance mechanism shall be submitted to the Manager before waste is placed in the new unit. [See Permit Condition II.K.6.].

II.N.3. Changes in financial assurance mechanisms shall be approved by the Manager pursuant to 40 CFR 264.143.

II.O. Financial Assurance for Facility Post-Closure

II.O.1. The Permittee shall comply with 40 CFR 264.145, as amended by OAR 340-104-0145, or 40 CFR 264.146 by providing documentation of financial assurance, as required by 40 CFR 264.151, as amended by OAR 340-104-0151, in the amount of the cost estimates required by Permit Condition II.M.1.

II.O.2. Changes in financial assurance mechanisms shall be approved by the Manager pursuant to 40 CFR 264.145.

II.P. Liability Requirements

II.P.1. The Permittee shall comply with the requirements of 40 CFR 264.147(a), as amended by OAR 340-104-0147, and the documentation requirements of 40 CFR 264.151, as amended by OAR 340-104-0151, including the requirements to have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs.

II.P.2. The Permittee shall comply with the requirements of 40 CFR 264.147(b), as amended by OAR 340-104-0147, and the documentation requirements of 40 CFR 264.151, as amended by OAR 340-104-0151, including the requirements to have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs.

II.Q. Incapacity of Owners or Operators, Guarantors, or Financial Institutions

The Permittee shall comply with 40 CFR 264.148.

II.R. Equivalent Materials/Information

If certain equipment, materials, procedures, and administrative information (such as names, phone numbers, addresses, obsolete forms, addition of new forms and to forms, format of tables or forms, deletion from forms of units certified as closed, etc.,) are specified in this Permit, the Permittee is allowed to use an equivalent or superior substitute or deletion. Use of such equivalent or superior substitute or deletion shall not be considered a modification of the Permit, but the Permittee shall present the proposed change to the Department, and then with Department approval (such approval may be verbal or written) submit to the Department by written letter the revision, accompanied by a narrative explanation, and the date the revision becomes effective. If the Department determines that the change is not in accordance with the approval, the Department will by letter direct the Permittee to submit the change again.

II.S. RCRA Subparts AA and BB and Other Air Emissions

The Permittee shall comply with the all applicable requirements found in 40 CFR 264 Subparts AA and BB, and other air emission physical and operational limitations and requirements in this Permit and the standalone documents.

II.T. ORS 466.065 Requirements

II.T.1. The Permittee shall not land dispose greater than 5,900,000 tons of hazardous waste during the ten-year term of this Permit without approval from the Department in accordance with ORS 466.065(1).

II.T.2. The Permittee shall not treat greater than 37,275,980 tons of hazardous waste during the ten-year term of this Permit without approval of the Department in accordance with ORS 466.065(1).

II.T.3. The Permittee shall comply with all applicable Federal and Oregon technological requirements for treating and disposing of hazardous waste.

II.T.4. The Permittee shall maintain the property line setback as specified at OAR 340-120-0010(e)(B) by having at least a 1,000 foot separation between active waste management areas and facilities, and property boundaries.

II.T.5. The Permittee, and its parent company, shall comply with all applicable Oregon and Federal requirements for financial and technical capability to properly construct and operate the Facility.

II.T.6. The Permittee shall own, or contract with, an emergency response provider or coordinator that can provide for timely response to a spill or release in Oregon of hazardous waste being transported to the Facility by a motor vehicle owned by the Permittee.

II.T.7. The Permittee shall determine if any transporter of hazardous waste hired by the Permittee, owns or has a contract with an emergency response provider or coordinator that can provide for timely response to a spill or release in Oregon of hazardous waste being transported by a motor vehicle to the Facility.

II.T.8. The Permittee shall, upon arrival at the Permittee's Facility of any motor vehicle transporting hazardous waste in a motor vehicle not owned or hired by the Permittee, request to review the transporter's authorization to transport hazardous waste in Oregon and the driver's authorization to drive a motor vehicle transporting hazardous waste in Oregon. The Permittee shall provide to the Department in writing the name of any transporter or driver that fails to demonstrate the requested authorization.

II.U. Management of Subpart CC Wastes

II.U.1. The Permittee shall not manage hazardous wastes containing an average volatile organic concentration of 500 parts per million by weight (ppmw), or more as determined by 40 CFR 264.1083, at any permitted tank or surface impoundment, until this Permit is modified to incorporate the requirements of 40 CFR 264.1082(b), except as 40 CFR 264.1080 and 40 CFR 264.1082(b) provide otherwise.

II.U.2.a. The Permittee is authorized to manage volatile organic hazardous wastes with an average concentration of 500 parts per million by weight, or more, as determined using 40 CFR 264.1083, at all permitted storage units in accordance with the Container Level 1 or Level 2 standards, as applicable, meeting the requirements of 40 CFR 264.1086(c) and (d), respectively. Except as provided by Permit Condition II.U.3., management of Container Level 3 standards is prohibited unless this permit is modified.

II.U.2.b. If the Permittee manages volatile organic hazardous wastes with an average concentration of 500 parts per million by weight or more, as determined by 40 CFR 264.1083, in containers at a permitted storage unit that require Container Level 1 or 2 standards, the Permittee shall comply with 40 CFR 264.1086(c) and (d), respectively.

II.U.3. The Permittee may manage volatile organic hazardous wastes with an average concentration of 500 parts per million by weight, or more, as determined by 40 CFR 264.1083, that are undergoing biotreatment in accordance with Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [A.R. 06092], Standalone Document No. 19.

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III. CONTAINER STORAGE

III.A. Design and Operation

III.A.1.a. The Permittee may store those containerized wastes listed under Permit Condition II.C.5. and II.C.5.a.i.v., and the second, third and fourth sentences in Permit Condition II.C.5.b.i. only in storage units S-1, S-2, S-3, S-4, S-5, S-6, S-10, and S-11A. The Permittee shall not store containerized water reactive hazardous wastes in these units except as allowed in Standalone Document No. 9, Container Storage Design and Operation Plan [A.R. 06082]. ‡ **Rev. 3**

III.A.1.b. The Permittee shall not store hazardous wastes listed under Permit Condition II.C.5.b.ii in all container storage units.

III.A.1.c. The Permittee may store containerized hazardous wastes in containment buildings B-2 and B-5 in compliance with Permit Conditions under III.A. through III. I and Standalone Document No. 9, Container Storage Design and Operation Plan. The Permittee may not have more than 50 hazardous waste containers in each of these containment buildings. ‡ **Rev. 3**

III.A.2. The quantity of containerized hazardous waste stored in each designated container storage unit shall be limited by the design capacity of that unit, as specified in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082].

III.A.3. The Permittee shall store containerized hazardous waste in the manner described in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082], except as otherwise specified in this section of the Permit. Compliance with the storage operation procedures outlined in Container Storage Design and Operations Plan [A.R. 06082] and Permit Condition II.A.1, shall constitute compliance with the following requirements of 40 CFR Part 264:

- 264.171 Condition of containers;
- 264.172 Compatibility with waste containers;
- 264.173 Management of containers;
- 264.174 Inspections;
- 264.176 Special requirements for ignitable or reactive wastes; and
- 264.177 Special requirements for incompatible wastes.

III.A.4. The Permittee is authorized by law to store or treat hazardous waste in containers in accordance with 40 CFR 262.34.

III.A.4.a. Except as provided in Section VII of this Permit, bioremediation of containerized solid wastes containing free liquids shall be conducted in storage units authorized to store liquid wastes in accordance with the operation procedures and monitoring in Standalone Document No. 19, Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [A.R. 06092].

III.A.5. All container storage units shall be designed in accordance with all design requirements, engineered drawings, and applicable recommendations in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082].

III.A.5.a.

Container storage units S-3 and S-5, are not authorized to store containerized liquid hazardous wastes unless this Permit is modified. ‡ **Rev. 3**

III.B. Inspections

The Permittee shall store all containers of hazardous waste on a single tier, (i.e., no stacking) at all container storage units, except as allowed by Permit Condition III.C.1. and Stand Alone Document No. 9 and except that small containers that are suitable for stacking (e.g., boxes or crates) may be stacked to a reasonable level, (not to exceed 5 feet in height) and intermodal type containers specifically designed for stacking may be stacked, provided the stack is stable and there is no apparent hazard of such containers tipping or falling and provided that inspection of such containers is not inhibited.

Containers used in biotreatment may be stacked three high. ‡ **Rev. 3**

The Permittee shall, immediately upon request from the Inspector reposition any container, as necessary, to make the label on that container visible from the aisle for the purpose of inspection.

III.C. Aisle Space

III.C.1. The Permittee shall maintain a minimum of 2.5 feet of aisle space for hazardous waste containers at all container storage units at the Facility. Maintenance of the specified aisle space shall constitute compliance with 40 CFR 264.35. At container storage unit S-2: The Permittee shall not double stack 55-gallon, or larger, hazardous waste containers unless all permitted floor space in an individual storage area (A, B, C, D or E) within container storage unit S-2 is occupied by a container. The Permittee may double

stack 55-gallon, or larger, containers if such permitted floor space is occupied. ‡ **Rev. 3**

Containers that have a volume less than 55-gallons may be double-stacked at anytime.

III.C.2. At container storage unit S-2, the Permittee shall maintain a minimum aisle width of four

(4) feet between hazardous waste container rows and between containers and walls for ignitable and reactive hazardous wastes. ‡ **Rev. 3**

III.D. Containment

III.D.1. The Permittee shall store hazardous waste containers in a manner that minimizes the potential for container deterioration. ‡ **Rev. 3**

III.D.2. Container storage of liquid and non-liquid hazardous wastes in S-1, S-2, S-3, S-4, S-5, S-6, S-10, and S-11A in the manner specified in Standalone Document No. 9, Container Storage Design and Operation Plan [A.R. 06082], shall constitute compliance with 40 CFR 264.175(b) and (c).

III.E. Requirement for Containerized Wastes

All containers holding hazardous waste shall be covered at all times, except when hazardous wastes are being added, removed, or inspected. ‡ **Rev. 3**

III.F. Special Requirement for Incompatible Wastes The Permittee shall comply with 40 CFR 264.177.

III.G. Closure

The Permittee shall close all container storage units in accordance with Section 1.0 of the Closure Plan in Standalone Document No. 5 [A.R. 06078] and Section II.J. of this Permit.

III.H. Additional Conditions at Container Storage Unit S-2

III.H.1. S-2 storage areas A through E, as shown in drawing 10-AS-1 in Standalone Document No. 9, shall be constructed such that 10% of the maximum volume stored in the specific storage area is contained within that specific storage area. At a minimum, all surrounding berms around each specific storage area shall be no less than 3 inches in height.

III.H.2. The Permittee shall follow the operational conditions found in Standalone Document No. 9, Container Storage Design and Operations Plan [A.R. 06082] as amended by Permit Conditions III.H.3. through III.H.7.

III.H.3. Within container storage unit S-2, the Permittee may only store hazardous wastes at storage areas A, B, C, D and E, as designated in drawing 10-AS-1 in Standalone Document No. 9. **‡ Rev. 3** Hazardous wastes found in the designated area "Receiving Area" shall be hazardous wastes undergoing analysis in accordance with Standalone Document No. 1, Waste Analysis Plan A.R. 06074].

III.H.4. Unless otherwise approved by the Department, the maximum allowable storage for hazardous waste containers for each storage location is: **‡ Rev. 3** III.H.5.

Activity	Risk	BMP
Placement of barges at TTD facility	1. Prop wash 2. Unnecessary turbidity 3. Damage to TTD facility dock and pilings	Transfer and placement of the barges at the TTD facility dock will be performed by the tug contractor using river current and minimum thru so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbidity during movement of the barges
Movement of barges along TTD facility dock	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary	Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care w

The Permittee shall maintain rows of hazardous waste containers to be no more than two 55-gallon drums wide. For hazardous waste containers larger than 55-gallon drums, a container row shall be no wider than the single largest container in that row. ‡

Rev. 3

III.H.6. The Permittee may not store incompatible wastes within the same storage area which is serviced by a single sump.

III.H.7. The Permittee shall have signage to indicate what class of hazardous waste (e.g., acid, oxidizer, toxic, etc.,) is being stored within a container storage unit which is serviced by a single sump.

III.I. Subpart CC Air Emission Requirements The Permittee shall comply with Permit Conditions II.U.2.a. and II.U.2.b.

IV. TANK STORAGE AND TREATMENT

IV.A. Applicability of Rules

IV.A.1. The Permittee shall comply with the regulations pertaining to hazardous waste tank systems in 40 CFR 264 Subpart J.

IV.A.2. The Permittee is authorized by law to store or treat hazardous waste generated on-site in tanks in accordance with 40 CFR 262.34.

IV.A.3 The Permittee shall not store hazardous wastes prohibited from storage under Permit Condition II.C.5.b.ii. in all tanks, and shall not treat hazardous wastes prohibited from treatment the first sentence of Permit Condition II.C.5.b.i. in all tanks.

IV.B. Bulk Liquid Storage and Treatment Facility/Wastewater Treatment Unit ‡ **Rev. 14**

IV.B.1. The bulk liquid storage and treatment facility/wastewater treatment unit shall consist of all associated ancillary equipment, containment system, and tanks which includes: Six 10,500 gallon tanks, two 5,200 gallon mix tanks, one 1,500 gallon clarifier, one 2,600 gallon thickener tank, one 1,440 gallon surge tank, two 400 gallon sand filters, two eleven gallon bag filters, and two 1,700 gallon carbon vessels ‡ **Rev. 14** ,as described in Standalone Document No. 8, Bulk Liquid Storage/Treatment Plan [A.R. 06081]. In addition, the tank system capacity includes the tanks described in the Wastewater Treatment Facility Operations Manual, also found in Standalone Document No. 8, Bulk Liquid Storage/Treatment Plan [A.R. 06081].

IV.B.2. The Permittee may store and treat any wastes, in liquid form, listed under Permit Conditions II.C.5. and II.C.5.a.i-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in the bulk liquid storage and treatment facility. Compliance with 40 CFR 264.198 for ignitable or reactive wastes is required, in order for such wastes to be managed in the Permitted tank systems. Additionally, if the waste is incompatible with any waste already in a tank, or the tank itself, based on compatibility assessment as specified in Standalone Document No. 1, Waste Analysis Plan [A.R. 06074], such waste shall not be stored or treated in that tank.

IV.B.3. The Permittee shall operate the bulk liquid storage and treatment facility/wastewater treatment unit ‡ **Rev. 14** in accordance with the procedures in Standalone Document No. 8, Bulk Liquid Storage/Treatment Plan [A.R. 06081].

IV.B.4. The Permittee shall maintain spill controls, and overfill prevention controls as required by 40 CFR 264.194. Overfill prevention controls shall be set such that one foot of freeboard in each tank (headspace) is maintained at all times.

IV.C. Stabilization Unit Tanks

IV.C.1. The stabilization unit tanks shall consist of 12 in-ground steel tanks, with a capacity of approximately 15,000 gallons each. The design of each tank and the secondary containment structure shall be as described in Standalone Document No. 10, Stabilization/Chemical Treatment Plan [A.R. 06083].

IV.C.2. The Permittee may store and treat any wastes described in Permit Condition II.C.5. and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in the stabilization unit tanks. Additionally, if any hazardous waste is water reactive, has a pH less than or equal to 2, or is incompatible with other wastes already in the tank, based on the compatibility assessment as specified in the Waste Analysis Plan [A.R. 06074], such waste shall be treated in accordance with the applicable sections of Standalone Document No. 10, Stabilization/Chemical Treatment Plan [A.R. 06083]. Water-reactive hazardous waste may only be treated upon Department approval for each waste stream (which approval shall not be considered a modification of this Permit).

IV.C.3. The Permittee shall operate the stabilization unit tanks in accordance with Standalone Document No. 10, Stabilization/Chemical Treatment Plan [A.R. 06083].

IV.C.4. The Permittee shall maintain at least two feet of freeboard in the stabilization unit tanks at all times. Hazardous waste in the unit, other than residue or stain on the inside of the tank walls, shall not exceed the two-foot freeboard requirement, except as may be necessary during the actual mixing process. Residue or stain on the inside of the tank walls above the two-foot freeboard limit shall not, in itself, result in a freeboard violation.

IV.D. Closure

The Permittee shall close all tank units in accordance with the applicable sections of Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078] and Section II.J. of this Permit.

IV.E. Subpart CC Air Emission Requirements

The Permittee shall comply with Permit Condition II.U.1.

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V. SURFACE IMPOUNDMENT STORAGE AND TREATMENT

V.A. Surface Impoundments.

V.A.1. Surface impoundments shall consist of two existing units P-A and P-B.

V.A.2.a The Permittee may store and treat any wastes, in liquid or semi-solid form, listed under Permit Condition II.C.5. and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in the surface impoundments. The Permittee shall not store or treat any hazardous wastes which are restricted from land disposal under 40 CFR Part 268 unless the applicable treatment standard as specified in 40 CFR Part 268 has been achieved prior to placement in the surface impoundments. In addition, as new hazardous wastes are prohibited from land disposal unless the wastes meet the land disposal restriction treatment standards under 40 CFR Part 268, the Permittee shall immediately cease placement of such wastes in any surface impoundment upon the effective date of the 40 CFR Part 268 regulation.

V.A.2.b. The Permittee shall not store hazardous wastes listed under Permit Condition II.C.5.b.ii. in the surface impoundments and shall not treat hazardous wastes listed in the first sentence under Permit Condition II.C.5.b.i. in the surface impoundments.

V.A.3. If any waste, or the product of residue of the treatment of such waste, is incompatible with wastes already in a surface impoundment, based on the compatibility assessment as specified in Standalone Document No. 1, Waste Analysis Plan [A.R. 06074], such waste shall not be placed into the surface impoundment.

V.A.4. The Permittee shall operate all surface impoundments in the manner specified in Standalone Document No. 13, Surface Impoundments Design and Operations Plan

[A.R. 06086]. The Permittee shall operate each surface impoundment in a manner to prevent physical barriers (i.e., solid material or sludge) from restricting the mixing of liquid waste.

V.A.5.a. The Permittee shall maintain freeboard in each surface impoundment as specified in Standalone Document No. 13, Surface Impoundments Design and Operations Plan

[A.R. 06086] and shall follow the procedures specified in Surface Impoundments Design and Operations Plan [A.R. 06086] to prevent overtopping.

V.A.5.b. The Department reserves the right to increase the amount of freeboard required at any surface impoundment if overtopping has occurred. Such a change could occur at any point during the life of this Permit and would be effective upon written notification from the Manager to the Permittee. Such a change would not require a Permit modification in accordance with 40 CFR 270.42.

V.A.6. Prior to placement of any sludge from the surface impoundments into a landfill unit, the Permittee shall follow the stabilization (when necessary) and analyses procedures outlined in the Waste Analysis Plan [A.R. 06074], Surface Impoundments Design and Operations Plan [A.R. 06086], and Stabilization/Chemical Treatment Plan [A.R. 06083] to ensure that the sludge has been properly stabilized. The Permittee may stabilize the sludge within the surface impoundments as specified in Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078], and Standalone Document No. 13, Surface Impoundments Design and Operations Plan, Response Action Plan [A.R. 06086].

V.A.7. The Permittee shall follow the requirements of Standalone Document No. 13, Surface Impoundments Design and Operations Plan [A.R. 06086] when emergency repairs are undertaken for an surface impoundment. ‡ **Rev. 3**

V.A.8. The Permittee shall follow the procedures in Standalone Document 13, Surface Impoundments Design and Operations Plan, Response Action Plan [A.R. 06086], for units P-A and P-B, that require a response action plan.

V.B. Subpart CC Air Emission Requirements

The Permittee shall comply with Permit Condition II.U.1.

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VI. LANDFILL DISPOSAL

VI.A. Existing Closed Landfill Units L-5, L-7, and L-9

VI.A.1. The Permittee shall inspect the leachate collection system in units L-5, L-7 and L-9 for the presence of liquid at the frequency specified in Standalone Document No. 3, Inspection Plan [A.R. 06076]. The results of the inspection, including the amount of any liquid found, shall be entered in the operating record. Prior to final Facility closure, if liquid is found in the leachate collection system, all pumpable quantities of such liquid shall be removed, to the extent practicable, within 24 hours of the time such liquid is found. The time for removal of liquid shall be 72 hours after finding liquid in the leachate collection system after final Facility closure. In all cases, the liquid shall be managed as hazardous waste.

VI.B. Operating Landfill Units L-12, L-13, and L-14

VI.B.1. The Permittee may dispose of any wastes listed under Permit Condition II.C.5. and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in landfill units L-12, L-13, or L-14 except that the following restrictions on waste disposal shall apply:

VI.B.2.a. The Permittee shall not dispose of hazardous wastes listed in the first sentence under Permit Condition II.C.5.b.i.

VI.B.2.b. The Permittee shall not dispose of wastes containing free liquids. Free liquids analyses shall be performed in accordance with the applicable procedures in Waste Analysis Plan [A.R. 06074]. Note: Liquid wastes that are contained in lab packs (packaged in

accordance with 40 CFR 264.316) or containers, that are very small such as ampoules, or containers that are designed to hold free liquids for use other than storage, such as capacitors or batteries (in accordance with 40 CFR 264.314), may be disposed without stabilization and related testing and verification procedures, provided other restrictions, as specified in this Permit or by other statutes or regulations, do not prohibit the land disposal of such wastes.

VI.B.2.c.i. The Permittee shall not dispose of any hazardous waste which was generated as a liquid and was then stabilized by the generator (or another off-site treatment facility) unless the Permittee has conducted testing to ensure that the waste has been properly stabilized, (i.e., achieves the appropriate treatment standard required by 40 CFR Part 268 and does not contain free liquids). Such testing shall be done by the Permittee, using sampling and analytical methods outlined in Waste Analysis Plan [A.R. 06074], and Stabilization/Chemical Treatment Plan [A.R. 06083]. Records of such analyses shall be maintained in the operating record for a minimum period of three years. This Permit Condition [VI.B.2.c.i.] shall not apply if the Permittee complies with Permit Condition VI.B.2.c.ii.

VI.B.2.c.ii. As an alternative to the testing by the Permittee specified in Permit Condition VI.B.2.c.i., the Permittee shall maintain documentation supplied by the generator (or another off-site treatment facility) that proper stabilization has been achieved. Documentation from the generator (or another off-site treatment facility) shall contain a signed certification that the stabilized hazardous waste achieves the appropriate treatment standard required by 40 CFR Part 268 and does not contain free liquids as specified in this Permit. The Permittee shall maintain such documentation in the operating record for a minimum period of three years.

VI.B.2.d. The Permittee shall not dispose of any wastes which are restricted from land disposal under 40 CFR Part 268 unless the applicable treatment standard in 40 CFR Part 268 has been achieved. In addition, as new hazardous wastes are prohibited from land disposal unless the wastes meet the land disposal restriction treatment standards under 40 CFR Part 268, the Permittee shall immediately cease disposing of such wastes upon the effective date of the 40 CFR Part 268 regulation, unless the treatment standards for the hazardous wastes in 40 CFR Part 268 have been achieved.

VI.B.2.e. The Permittee shall not dispose ignitable or reactive hazardous wastes (Environmental Protection Agency Waste numbers D001 or D003, respectively) or any EPA-listed hazardous waste for which the basis for listing is ignitability or reactivity, unless the waste has been treated to render it nonignitable or nonreactive. For such wastes, the Permittee shall follow testing procedures used to determine ignitability and reactivity as specified in Waste Analysis Plan [A.R. 06074]. This restriction on disposal of ignitable waste does not apply to ignitable waste disposed in accordance with 40 CFR 264.312(b).

Note: Cyanide or sulfide bearing waste as defined in 40 CFR 261.23(a)(5) may be packaged in accordance with 40 CFR §264.316 and disposed without first being treated or rendered nonreactive.

VI.B.3. The Permittee shall operate landfill units L-12, L-13, and L-14 in accordance with the operating practices in Standalone Document No. 14, Landfill Design and Operations Plan [A.R. 06087] and Standalone Document No. 6, Surface Water Management Plan [A.R. 06079].

VI.B.4. The Permittee shall maintain a permanent accurate record of the approximate three

dimensional location of each hazardous waste type, based on grid coordinates, within units L-12, L-13 and L-14 in accordance with 40 CFR 264.309. This record shall include the information necessary to locate a specific hazardous waste type and shall be based on information contained in the manifest (generator identification number, waste code, and date of disposal). This Condition shall apply to all wastes placed in units L-12, L-13 and L-14, irrespective of the date of disposal. Upon final closure of the Facility, the Permittee shall submit copies of these records for units L-12, L-13, and L-14 to the Manager.

VI.B.5.

‡ **Rev. 9** Liquid in the primary leachate collection system of unit L-12, L-13, or L-14 will not exceed 30 cm (one foot) in depth over the primary liner after waste has been placed. (This does not include the area of the sump used to accumulate sufficient quantities of liquid for pumping). Liquid in the secondary leachate collection system of unit L-12, L-13, and L-14, will be removed, when pumpable quantities exist, to the extent practicable, within 24 hours after those quantities are found. The leachate from both the primary and secondary leachate collection systems will be managed for dust suppression within the footprint of the landfill from which the leachate originated per Standalone Document 14 – Landfill Design and Operations Plan. Leachate application shall be inspected daily to assure that the application is conducted in a controlled manner to prevent ponding and runoff. Leachate not used for dust suppression will be managed as hazardous waste and routed to the wastewater treatment unit. During the post-closure period, after final Facility closure, liquid from the secondary leachate collection systems shall be pumped, as described above, within 72 hours after such liquid is found.

VI.B.6. For landfills units L-12, L-13, and L-14, the Permittee shall follow the procedures specified in Standalone Document No. 15, Landfill Response Action Plan [A.R. 06088].

VI.B.7. The Permittee shall close units L-12, L-13, and L-14 in accordance with the applicable sections of Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078], Standalone Document No. 16, Construction Quality Assurance Plan [A.R. 06088] and Standalone Document No. 17, Landfill Final Cover Design Plans [A.R. 06090], and Permit Condition II.J.

VI.B.8. The Permittee shall close units L-13, L-12, and L-14 in accordance with 40 CFR 264.19 and Standalone Document No. 16, Construction Quality Assurance Plan [A.R. 06089].

VI.B.9. The Permittee shall follow the requirements for post-closure care of units L-12, L-13, and L-14 in accordance with the applicable sections of Standalone Document No 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078] and Section II.L. of this Permit. The post-closure care period for each unit shall begin at the time of completion of closure of each unit.

VI.B.10. The landfill units shall be operated and maintained using best management practices designed to prevent fires, pyrophoric events, explosions, combustion, or conflagration within the footprint of any operating landfill. ‡ **Rev. 3**

VI.C. [Reserved]

VI.D. [Reserved]

VI.E. Acceptance, Storage, Treatment, and Disposal of Corrective Action Management Unit [CAMU]-Eligible Wastes

VI.E.1. The Permittee is authorized to accept, store, treat, and dispose of CAMU-eligible wastes, as defined at 40 CFR 264.552(a)(1), in accordance with Permit Conditions

VI.E.2. through VI.E.12.

VI.E.2.a. In addition to the approved Waste Analysis Plan requirements: For each single-type CAMU remediation waste acceptance, the Permittee shall investigate and determine that the authority that designated the waste as CAMU-eligible waste is authorized for such designation in accordance with either being an US EPA regional office or state authorized by 40 CFR Part 271. The results of the investigation, which may include hand-written notes from phone calls, shall be placed in the operating record.

VI.E.2.b. In addition to the approved Waste Analysis Plan requirements: For single CAMU remediation wastes, the Permittee shall investigate and determine if the regulatory authority that designated the waste as CAMU-eligible waste provided a public notice and an opportunity for public comment. The results of the investigation, which may include hand-written notes from phone calls, shall be placed in the operating record.

VI.E.3. The Permittee shall comply with the requirements of 40 CFR 268.7(b)(4) except the certification shall state that the CAMU-eligible wastes meet the treatment standards in 40 CFR 264.555(a)(2).

VI.E.4. The Permittee shall dispose all CAMU-eligible waste in either landfill L-12, L-13, or, L-14.

VI.E.5. All CAMU-eligible wastes that are disposed in a landfill shall meet any of the standards in 40 CFR 264.555(a)(2)(i), (ii), or (iii).

VI.E.6. For new single CAMU-eligible wastes proposed to be received at the Facility, the Permittee shall notify the Department and persons on the Facility's mailing list of the Permittee's intent to receive the waste unless exempted in accordance with Permit Condition

VI.E.9. The Permittee shall abide by all conditions in any Department exemption letter.

VI.E.7. In the notification to the Department and the Facility mailing list regarding the Permittee's intent to receive CAMU-eligible wastes at the Facility, the Permittee shall state the source of the CAMU-eligible waste, the principal hazardous constituents in the waste, and the treatment requirements. The notification shall state that there will be a 15-day period after receipt of the notification for public comment. The notification shall state that any comments should be sent to the Department and that any comment may include an objection to receipt of the CAMU-eligible waste.

VI.E.8.a. The Permittee may not receive any CAMU-eligible waste within the 15-day comment period specified in Permit Condition VI.E.7., and may not receive CAMU-eligible waste until the Department notifies the Permittee that the Department does not object to placement of the CAMU-eligible waste in the landfill. The Department may take a 30day review period, with a possible 30-day extension because of public concerns or insufficient information, from the date of the Permittee's notice of intent to receive the CAMU-eligible waste.

VI.E.8.b. The Department may object to the Permittee's placement of any single-type remediation

CAMU-eligible waste stream. If the Department notifies the Permittee that the Department objects, the Permittee may not receive the single CAMU-eligible waste. If, at the end of the review period, the Department has not notified the Permittee that the Department has chosen not to object, the Permittee may not receive the single remediation CAMU-eligible waste until the objection has been resolved, or, the Permittee obtains a permit modification in accordance with 40 CFR 270.42 specifically authorizing receipt of the single remediation CAMU-eligible waste.

VI.E.9. Upon an approved permit modification submitted by the Permittee, the Department may modify, reduce, or eliminate the notification requirements of Permit Condition VI.E.6. and VI.E.7. The Department's written decision will be based on minimal risk.

VI.E.10. The Permittee may accept Rhone Poulenc (ORD 990 659 492) granular activated carbon remediation wastes as specifically described in the permit modification request, dated October 4, 2004. Such wastes shall be containerized when disposed of in a landfill. Such containers shall remain intact during disposal and when covered by operational lifts.

VI.E.11.
[Reserved]

VI.E.12. The Permittee may accept and dispose the single remediation granular activated carbon CAMU-eligible wastes, as described in the permit modification request, dated October 4, 2004, from the Union Pacific Railroad Tie Treating Facility [UPRTTF], EPA ID ORD 982 658 742, The Dalles, Oregon. All CAMU-eligible wastes from the UPRTTF facility shall be disposed by macro encapsulation in accordance with this Permit and Standalone Document No 11, the Debris Treatment Plan [A.R. 06084].

VII. CONTAINMENT BUILDING STORAGE AND TREATMENT

VII.A.1.a The Permittee is authorized to store and treat any non-liquid wastes listed under Permit Condition II.C.5 and II.C.5.a.i.-v. and the second, third and fourth sentences in Permit Condition II.C.5.b.i. in containment buildings B-1, B-2, B-4 B-5, and B-9 including crushing and size reduction.

VII.A.1.b. The Permittee shall not store hazardous wastes listed under Permit Condition II.C.5.b.ii. in containment buildings and shall not treat hazardous wastes listed in the first sentence under Permit Condition II.C.5.b.i. in containment buildings.

VII.A.2. The Permittee shall operate and maintain all containment buildings in accordance with Standalone Document No. 12, Containment Buildings Design and Operations Plan [A.R. 06085] and all applicable requirements contained in 40 CFR 264 Subpart DD. Bioremediation in containment buildings authorized for the storage and treatment of hazardous wastes containing free liquids shall be conducted in accordance with Standalone Document No. 19, Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [A.R. 06092].

VII.A.3. The Permittee may store and treat wastes containing free liquids in containment building B-5.

VII.A.4. The Permittee is authorized to operate and maintain its Organic Recovery Unit and associated ancillary equipment including tanks, containment and flare in accordance

with Standalone Document No. 19, Bioremediation Facility and Organic Recovery Unit Design and Operations Plan as approved by the Department. ‡ ‡ **Rev. 12**

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VIII. SURFACE WATER MANAGEMENT PLAN

- Design, Operation, and Maintenance of Surface Water Management System
- The Permittee shall operate and maintain a surface water management system in accordance with Standalone Document No. 6, Surface Water Management Plan [A.R. 06079]. The Permittee shall maintain a copy of the Surface Water Management Plan

[A.R. 06079] at the Facility.

VIII.B. The Permittee shall construct the landfill L-14 surface water management system in accordance with Standalone Document No. 6, Surface Water Management Plan [A.R. 06079] and Standalone Document No. 18, Landfill Design Drawings [A.R. 06091].

VIII.C. The Permittee shall inspect the surface water runoff and run-on at closed and operating landfills in accordance with Standalone Document No. 3, Inspection Plan [A. R. 06076].

VIII.D. The Permittee is allowed to implement changes to Standalone Document No. 6, Surface Water Management Plan [A.R. 06079], in the event of emergency conditions, without prior approval of the Department. The Permittee shall submit any changes to the plan implemented because of an emergency to the Manager for approval within 15 calendar days after occurrence of the emergency. Such implementation of changes shall not require a Permit modification unless the Permittee plans to make the changes permanent.

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IX. PAST PRACTICE UNITS ‡ Rev. 15

IX.A. Definition of Past Practice Units

IX.A.1 Past practice units at this Facility shall consist of landfill units L-1, L-3, L-5, and L-6.

IX.B. Post-Closure Care of Landfill Units L-1, L-3, L-5, and L-6

IX.B.1. The Permittee shall implement a detection groundwater monitoring program for the past practice units which complies with the requirements of Section X of this Permit. Monitoring well locations for the past practice units are listed in Table X-1 of this Permit and are displayed on Figure 1 of this Permit. Monitoring well sampling frequencies are specified in Table X-1 of this Permit.

IX.B.2. The Permittee shall follow the post-closure care maintenance procedures outlined in Standalone Document No. 5, Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [A.R. 06078] for past practice units L-1, L-3, L-5, and L-6.

IX.C. Corrective Action for Past Practice Units L-1, L-3, L-5, and L-6 The Permittee shall follow the requirements in Permit Conditions X.D.4. through X.E.5. in response to a confirmed exceedance of the detection monitoring criteria as specified in Permit Conditions X.D.1. through X.D.3.

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X. GROUNDWATER DETECTION MONITORING PROGRAM ‡ Rev. 15

X.A. Monitoring Well/Piezometer Locations

X.A.1. The Permittee shall maintain a groundwater detection monitoring program as specified below at the locations for detection monitoring that are listed in Table X-1 of this Permit and displayed on Figure 1 of this Permit. [40 CFR 264.97 and 264.98]

X.A.2. The Permittee shall maintain the network of piezometers, for the purpose of determining groundwater elevations, at the locations listed in Table X-2 of this Permit and displayed on Figure 1 of this Permit.

X.A.3. The point of compliance is the vertical surface located at the hydraulically downgradient boundary of the Waste Management Areas listed in Table X-1. [40 CFR 264.95].

X.B. Well Construction, Maintenance, Replacement and Decommissioning

X.B.1. The Permittee shall maintain the monitoring wells and piezometers identified in Permit Conditions X.A.1. and X.A.2., in accordance with Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.B.2. All new and replacement monitoring wells and piezometers shall be drilled and constructed as approved by the Department. A well installation work plan shall be submitted to the Department, for approval, for all new and replacement monitoring wells and piezometers. The Permittee may not begin drilling until Department approval has been granted. All new and replacement monitoring wells and piezometers shall be designed, constructed, and installed in accordance with Oregon Water Resources Department rules OAR 690-240; and, as appropriate, in general accordance with current guidance from the Department and the Environmental Protection Agency for drilling and construction of groundwater monitoring wells. Minor changes to the well installation work plan shall not be considered a Permit modification.

The Permittee shall take all reasonable precautions during drilling to prevent cross contamination between any water-bearing hydrologic zone and the geologic zones overlying and underlying the water-bearing hydrologic zone.

X.B.3. The Permittee shall maintain all monitoring wells and piezometers in good working order, making necessary repairs in a timely manner so that sampling activities do not occur outside the sampling timeframes specified in Permit Condition X.C.2.a. The Permittee shall maintain an adequate supply of replacement parts and repair equipment so that each groundwater sampling event [as defined in Permit Condition X.C.2.a.] is not unreasonably delayed. The Permittee shall maintain a list of spare parts and equipment that will fulfill the terms of this Permit Condition. This list shall be approved by the Department. The Department's approval under this Permit Condition shall not be considered a Permit modification.

X.B.4. The Permittee shall follow the procedures in Table 3-2 of Standalone Document No. 3, Inspection Plan [A.R. 06076] and in Section 3.4 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] for routine inspection of monitoring wells and piezometers.

X.B.5. The Permittee shall maintain borehole integrity of each monitoring well and piezometer for any groundwater monitoring program developed to satisfy 40 CFR 264.98, 264.99 and 264.100, as required by 40 CFR 264.97(c). The Permittee shall inspect groundwater wells at the Facility not identified in the previous sentence at least once every five years beginning August 1, 2007 as provided in Section 3.4 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.B.6. Any replacement monitoring wells or piezometers that may be required during the life of this Permit shall be installed as close as appropriate and practicable to the monitoring well or piezometer being taken out of service. If a monitoring well or piezometer shall be replaced for any reason during the term of this Permit, it shall be replaced within 90 calendar days of the date taken out of service unless the Department approves a longer period of time.

X.B.7. All new or replacement groundwater sampling pumps shall be dedicated bladder pumps unless the Department approves use of another type of pump or sampling device in writing. The Department's approval under this Permit Condition shall not be considered a permit modification.

X.B.8. All monitoring wells or piezometers that require decommissioning shall be decommissioned in accordance with Oregon Water Resources Department rules OAR 690-240 and, as appropriate, in general accordance with current guidance from the Department and the Environmental Protection Agency for decommissioning groundwater monitoring wells. Written approval for monitoring well or piezometer decommissioning is required from the Department. Monitoring well or piezometer decommissioning documentation, as required by OAR 690-240-0510(6), shall be submitted to the Department within 60 calendar days after completion of decommissioning.

X.B.9. By written direction from the Department, the Permittee shall decommission monitoring wells or piezometers in the groundwater monitoring program developed to satisfy 40 CFR 264.98, 264.99 and 264.100, that do not meet the requirements in 40 CFR 264.97(c). In determining whether to issue the written direction, the Department will consider the Permittee's evaluation, if any, for whether the monitoring well(s) or piezometer(s) meets the requirements in 40 CFR 264.97(c).

X.B.10. The Permittee shall submit to the Department within 60 calendar days of installation of any new or replacement monitoring well or piezometer (or group of monitoring wells or piezometers), or decommissioning of an existing monitoring well or piezometer (or group of monitoring wells or piezometers), revised versions of Table X-1, Table X-2, and Figure 1. The Permittee shall obtain a Permit modification for any new or replacement monitoring well.

X.C. Program Operation

X.C.1. Groundwater Elevations and Flow Direction

X.C.1.a. The Permittee shall determine the elevation of the groundwater surface at each monitoring well and piezometer listed in Table X-1 and Table X-2 of this Permit, each time the groundwater is sampled. [40 CFR 264.97(f)]

X.C.1.b. Groundwater level measurements for each monitoring well shall be obtained prior to purging the well. In order to minimize the potential for error caused by temporal variations, the Permittee shall obtain all water level measurements within as short a time as practicable. On each day that water level measurements are being collected under this Permit Condition, the barometric pressure shall be recorded and entered into the operating record.

X.C.1.c. The Permittee shall use these data to determine the rate and direction of groundwater flow at each Waste Management Area annually, and construct groundwater elevation (or potentiometric surface) contour maps for Level 1 and Level 2 of the Selah Aquifer

annually. The contour maps and flow rates shall be submitted to the Department in the second semi-annual monitoring report. The Permittee shall submit, with the contour maps, a written review of the adequacy of the groundwater monitoring system relative to observed groundwater flow directions with respect to each Waste Management Area.

X.C.1.d. Graphs of groundwater elevation vs. time will be submitted annually, in the second semi-annual monitoring report, for all monitoring wells listed in Table X-1 and all piezometers listed in Table X-2, including all available historical groundwater elevation data.

X.C.2. Groundwater Sampling and Analysis

X.C.2.a. The Permittee shall obtain water quality samples from each detection monitoring well listed in Table X-1 of this Permit and displayed on Figure 1 of this Permit at the frequencies designated on Table X-1 of this Permit, in accordance with the procedures in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080]. Semiannual groundwater sampling events shall be started and finished in the months of March through May, and September through November, respectively, during each calendar year. For all semiannual, annual, and all other groundwater sampling events, the Permittee shall notify the Department within five (5) working days prior to the sampling event.

X.C.2.b. The Permittee shall analyze all groundwater samples obtained under Permit Condition X.C.2.a. for the constituents and parameters listed in Table X-3 of this Permit, using procedures specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.C.2.c. Results of all analyses, including semiannual analyses, verification analyses, and

Appendix IX analyses, shall be submitted to the Department within 45 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report. In no case shall the period between the last date of sampling and the date of submission to the Department of analytical results exceed 90 calendar days unless a written extension is granted by the Department. The Permittee shall document when the analytical laboratory's quality-assured data reports are received. The report submitted to the Department shall contain laboratory quality-assured results (as specified in the Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080] reported down to the method detection limit (MDL), and the reporting limit (RL) as specified in Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080]. The MDL results are for informational purposes and will be discussed in the reports for each sampling event, as described in the Groundwater Monitoring Plan.

X.C.2.d. Semiannual groundwater monitoring reports shall also include the information listed in Section 7.2 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

X.C.2.e. The Permittee shall enter all monitoring, testing, and quality-assured analytical data obtained pursuant to Permit Condition X.C. in the operating record as required by Permit Condition I.M. Upon written request by the Department, these results shall be submitted within 30 calendar days after the Permittee's receipt of the request, provided the Permittee has received the analytical laboratory's quality-assured data report.

‡ Rev. 16

X.D. Data Evaluation

X.D.1. The results of analyses obtained pursuant to Permit Condition X.C.2. shall be compared

to the following detection monitoring criteria for the Volatile Organic Constituents (VOCs) listed in Table X-3:

X.D.1.a. For Chloromethane; Dichlorodifluoromethane; Dichloroethane,1,1-; Methylene chloride; Tetrachloroethene; Toluene; Trichloroethane,1,1,1-; Trichloroethene; and Trichlorofluoromethane in detection monitoring wells 3R-2, 4B-1, 5D-1, and 5Q-1 **± Rev. 20** each detection monitoring criterion listed in Table X-4 multiplied by five; or

X.D.1.b. For all other detection monitoring wells not included in Permit Condition X.D.1.a., the detection monitoring criteria listed in Table X-4.

X.D.1.c. For any VOCs detected in detection monitoring wells 3R-2, 4B-1, 5D-1, or 5Q-1 **± Rev. 20** that are degradation products of Chloromethane; Dichlorodifluoromethane; Dichloroethane,1,1-; Methylene chloride; Tetrachloroethene; Toluene; Trichloroethane,1,1,1-; Trichloroethene; and Trichlorofluoromethane, the Permittee may add those VOCs to Permit Condition X.D.1.a. after Department approval.

X.D.2. Upon determination of VOCs in any monitoring well exceeding the applicable criteria specified in Permit Condition X.D.1. of this Permit, the Permittee shall:

X.D.2.a. Notify the Department of this finding, in writing, within 7 calendar days after receiving the analytical laboratory's quality-assured data report [40 CFR 264.98(g)(1)]; and,

X.D.2.b. Within 30 calendar days after this finding, collect two samples from any affected monitoring well(s), following the procedures identified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080], and reanalyze the samples for all VOCs specified in Table X-3 of this Permit that exceeded the applicable criteria in Permit

Condition X.D.1. In no case shall the period between the date of the determination under Permit Condition X.D.2. and the date of the submission to the Department of the analytical results for the sampling under this Permit Condition exceed 135 calendar days unless a written extension is granted by the Department.

X.D.2.c. The Permittee may elect to forgo verification sampling activities described under Permit Condition X.D.2.b. and instead follow the requirements of Permit Condition X.D.4.

X.D.3. If the analytical laboratory's quality-assured data results from the analyses in Permit Condition X.D.2.b. show that:

X.D.3.a. Neither verification sample confirms the detection of VOCs above the applicable detection monitoring criteria specified in Permit Condition X.D.1., the Permittee shall resume detection monitoring according to the schedule in Permit Condition X.C.2.a. and notify the Department in writing that the detection monitoring program is being resumed; or

X.D.3.b. One or both verification samples confirm the detection of VOCs above the applicable detection monitoring criteria specified in Permit Condition X.D.1., the Permittee shall follow the requirements of Permit Condition X.D.4.

X.D.4. Response to Confirmed Exceedance

X.D.4.a. The Permittee shall notify the Department in writing that the detection monitoring criteria have been exceeded. This notification shall occur within 7 calendar days after receipt of the analytical laboratory's quality-assured data report obtained in Permit Condition X.D.3.b., or within 7 calendar days after receipt of the analytical laboratory's quality

assured data report received under Permit Condition X.C.2. if the Permittee elects to forgo verification sampling as provided in Permit Condition X.D.2.c.; and

X.D.4.b. The Permittee shall sample the affected monitoring well(s) within 30 calendar days after receipt of the analytical laboratory's quality-assured data report obtained in Permit Condition X.C.2., or within 30 calendar days of receipt of the analytical laboratory's quality-assured data report received under Permit Condition X.C.2. if the Permittee elects to forgo verification sampling as provided in permit Condition X.D.2.c., and analyze for the constituents identified in 40 CFR Part 264 Appendix IX.

X.D.4.c.i. If any Appendix IX constituents not listed in Table X-3 of this Permit are detected above the applicable detection monitoring criteria as specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080], the Permittee may resample within 30 calendar days after receipt of the analytical laboratory's quality-assured data report and repeat the Appendix IX analysis for any new constituents detected above the applicable detection monitoring criteria. If the second analysis confirms the presence of new constituents above the applicable detection monitoring criteria, the Permittee shall report the concentrations of these detected constituents to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the second analysis.

X.D.4.c.ii. If the Permittee chooses not to resample, then the Permittee shall report the concentrations of the additional constituents detected above the applicable detection monitoring criteria to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the samples collected under Permit Condition X.D.4.b.

X.D.4.d. Within 90 calendar days after receipt of the analytical laboratory's quality-assured data

report for Appendix IX constituents required under Permit Condition X.D.4.b., the Permittee shall submit either of the following:

X.D.4.d.i. An application for a permit modification to establish a compliance monitoring program, for the affected monitoring well(s), as specified in 40 CFR 264.98(g)(4), or, if any hazardous constituents are above the groundwater concentration limits, to initiate a corrective action program, as specified in Permit Condition X.E. unless the Permittee has submitted a notice of intent under 40 CFR 264.98(g)(4)(iv) to revise the groundwater concentration limits or,

X.D.4.d.ii. A report demonstrating that a source other than a regulated unit or the past practice units caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater; and in addition, when required by 40 CFR 264.98(h), an application for a permit modification to make any appropriate changes to the detection monitoring program.

X.D.4.e. If the Department determines that a report submitted in accordance with condition X.D.4.d.ii. fails to identify a source of contamination other than a regulated unit or past practice unit, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water, then the Permittee shall within 60 days of the Department's determination submit an application for a permit modification to establish a compliance monitoring program, as specified in 40 CFR 264.98(g)4, or, if any hazardous constituents are above the groundwater concentration limits, to initiate corrective action, as specified in Permit Condition X.E. unless the Permittee has submitted a notice of intent under 40 CFR 264.98(g)(4)(iv) to revise the groundwater concentration limits.

X.D.5. [Reserved]

X.E. Corrective Action Process

X.E.1. Upon exceedance of the groundwater concentration limit(s), as determined by Permit Conditions X.D.4.d. or X.D.4.e., the Permittee shall send a written request to the Department's Eastern Region Environmental Cleanup Manager requesting a meeting. The written request shall be sent within 15 calendar days after it is determined that the groundwater protection standard(s) has been exceeded. The written request shall also contain the following information:

X.E.1.a. Description of release with information known to date,

X.E.1.b. Description of Permittee's obligation to notify the Environmental Cleanup Manager about the release in accordance with this Permit, and,

X.E.1.c. Description of Permittee's duty to initiate corrective action in accordance with this Permit if any groundwater concentration limit(s) is exceeded.

X.E.2. The Permittee shall meet with the Department's Eastern Region Environmental Cleanup Program within 45 calendar days after the date on the written notification sent in accordance with Permit Condition X.E.1. unless the Department approves a longer time period (which approval shall not be considered a modification of this Permit). Such a meeting is intended to initiate development of a corrective action written agreement for the Facility.

X.E.3. The Permittee shall enter into a written agreement with the Department's Eastern Region Environmental Cleanup Program within 180 calendar days after the date on the written notification sent in accordance with Permit Condition X.E.1. The agreement shall provide that any corrective action be implemented under OAR 340-122 consistent with

the requirements of 40 CFR 264.90 to 264.101. The agreement shall also provide that in the event of disagreement between the Permittee and Department regarding whether any action under the agreement is consistent with or exceeds 40 CFR 264.90 to 264.101, the Permittee and Department shall make a good faith effort to resolve the dispute by taking the following actions: (a) discussing the dispute between the Permittee's Environmental Manager and the Department's Project Manager, (b) if necessary, referring the dispute for resolution to the Permittee's Facility Manager and the Department's Cleanup Manager; and (c) if necessary, providing each other their respective positions in writing and referring the dispute for resolution by the Department's Eastern Region Administrator, in consultation with the Permittee's Market Area Manager. ‡ **Rev. 3**

X.E.4. The agreement entered into under Permit Condition X.E.3 shall be processed as a Class 3 Permit modification and shall be considered an enforceable Condition of this Permit.

X.E.5. During the course of the corrective action agreement, the Department may determine it necessary to revise the agreement or corrective action activities conducted under the agreement. Changes to the agreement, or corrective action activities conducted under the agreement that are implemented after the effective date of this Permit may require a modification to the Permit. The Permittee shall notify the Manager in writing at least 30 days prior to any planned changes to the agreement or corrective action activities conducted under the agreement. Upon notification by the Permittee, the Manager will determine whether or not a Permit modification will be needed. If a Permit modification is needed, the Manager shall so notify the Permittee, and upon receipt of such notice, the Permittee shall proceed with a Permit modification in accordance with the procedures set forth in 40 CFR 270.41 and 270.42, incorporated by reference under OAR 340-100-0002 and as modified by OAR -105-0041 and OAR 340-106-0005. In accordance with 40 CFR 270.42(e), as incorporated by reference under OAR 340-1000002, the Permittee may seek, and the Manager may grant, temporary authorization to

implement changes to the agreement or corrective action activities conducted under the agreement prior to the final approval of a Permit Modification.

X.E.6. The agreement or corrective action activities conducted under the agreement, may be modified at any time under the Department's Environmental Cleanup Program authority pursuant to the agreement, provided the Permittee complies with the requirements of

X.E.5. The Department's Environmental Cleanup Program authority to implement changes to the agreement, or corrective action activities conducted under the agreement, shall not be restricted or hindered by any requirements to modify this Permit. Changes approved under the Department's Environmental Cleanup program authority and implemented by the Permittee shall not be a violation of any condition of this Permit or any requirement to modify this Permit provided the Permittee complies with the requirements of X.E.5.

X.E.7. The requirement to modify this Permit to accommodate changes in the agreement or corrective action conducted under the agreement shall not be in any way interpreted or deemed to replace, supersede, supplant, modify, or amend the Permittee's right to dispute resolution under the agreement.

X.E.8. If, after the conclusion or stabilization of corrective action activities, either the Permittee or the Department determines that the Facility should return to a compliance monitoring program, the Permittee must submit a permit modification request to institute a renewed compliance monitoring program under this Permit.

X.F. Post Closure Monitoring

X.F.1. All procedures described in Section X of this Permit shall apply to the post-closure care period, as well as the active life period of each regulated unit or waste management area.

X.G. Request for Permit Modification

X.G.1. If the Permittee determines the detection monitoring program no longer satisfies the requirements of 40 CFR 264.98, then within 90 calendar days the Permittee shall submit an application for a permit modification to make any appropriate changes to the detection monitoring program. [40 CFR 264.98(h)]

Activity	Risk	RMP
Activity	Risk	BMP
Placement of barges at TTD facility	1. Prop wash 2. Unnecessary turbidity 3. Damage to TTD facility dock and pilings	Transfer and placement of the barges at the TTD facility dock will be performed by the tug contractor using river current and minimum thrust so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbidity during movement of the barges.
Movement of barges along TTD facility dock	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 4. Control of barges while moving.	Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care will be taken during barge movement to ensure no damage is caused to the TTD facility dock or pilings. Barges will remain tied to the dock with a minimum of one dock line during mooring operations. At no time will barges be released and moved away from the dock to facilitate placement of another barge along the dock, unless the barge is under the control of the tug contractor.
Unloading of dredge material from barges at TTD facility	1. Spill or dripping dredge material on dock 2. Dredge material introduced into site storm water system 3. Spill of dredge material into the river	6-mil poly sheeting will be placed under travel area of the overhead crane and clamshell bucket to capture any drips or dredge material the may fall from the clamshell during transfer of dredge material to containment vault. Dredge material transfer operations will be isolated from the remainder of the facility storm water management system. No storm water or water resulting from cleaning the exterior of haul vehicles will be managed through the on-site WWT facility. In the unlikely event dredge materials were
ADIACENT PROPERTY OWNERS: Chemithon Alaska Marine Port of Seattle	Lafarge North America SITE LOCATION ADDRESS: 5400 West Marginal Way SW Seattle, Washington 98106	IN: Section 19; Township 24N; Range 4E COUNTY: King STATE: WA

- Standalone Document 1
- Standalone Document 2
- Standalone Document 3
- Standalone Document 4
- Standalone Document 5
- Standalone Document 6
- Standalone Document 7
- Standalone Document 8

- Waste Analysis Plan, administrative record no. 06074.
- Waste Analysis Plan, administrative record no. 06074.
- Security Procedures, Hazard Prevention, Training Plan, administrative record no. 06075.
- Inspection Plan, administrative record no. 06076.
- Contingency Plan, administrative record no. 06077.
- Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance, administrative record no. 06078.
- Surface Water Management Plan, administrative record no. 06079.
- Groundwater Monitoring Plan, administrative record no. 06080.
- Bulk Liquid Storage/Treatment Plan, administrative record no.

Activity	Risk	BMP
Placement of barges at TTD facility	1. Prop wash 2. Unnecessary turbidity Damage to dock and pilings	Transfer and placement of the barges at the TTD facility will be performed by the tug contractor using river current and minimum thrust so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbid during movement of the barges. Care will be taken during barge movement to ensure no damage is caused to the facility dock or pilings. Barges will remain tied to the dock with minimum of one dock line during mooring operations. At no time will barges be released moved away from the dock to facilitate placement of another barge along the dock, unless the barge under the control of the tug contractor.
Movement of barges along TTD facility dock	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 4. Control of barges while moving	Barges will be moved along the dock using the water from crane to eliminate the risk of prop wash and unnecessary turbidity. Care will be taken during barge movement to ensure no damage is caused to the facility dock or pilings. Barges will remain tied to the dock with minimum of one dock line during mooring operations. At no time will barges be released moved away from the dock to facilitate placement of another barge along the dock, unless the barge under the control of the tug contractor.
Unloading of dredge material from barges at TTD facility	1. Spill or dripping of dredge material on dock 2. Dredge material introduced into site storm water system 3. Spill of dredge material into the river	6-mil poly sheeting will be placed under travel area of the overhead crane and clamshell bucket to capture any drips or dredge material that may fall from the clamshell during transfer of dredge material to containment vault from the remainder of the facility storm water management system. No storm water or water resulting from cleaning the exterior of haul vehicles will be managed through the on-site WWT facility. The unlikely event dredge materials were
ADJACENT PROPERTY OWNERS: Chemithon Alaska Marine Port of Seattle	Large North America SLL LOCATION: 400 West Marginal Way SW, Seattle, Washington 98106	Section 19, Township 24N Range 4E, County: King STATE: WA

Standalone Document 1	Waste Analysis Plan, administrative record no. 06074.
Standalone Document 2	Security Procedures, Hazard Prevention, Training Plan, administrative record no. 06075.
Standalone Document 3	Inspection Plan, administrative record no. 06076.
Standalone Document 4	Contingency Plan, administrative record no. 06077.
Standalone Document 5	Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance, administrative record no. 06078.
Standalone Document 6	Surface Water Management Plan, administrative record no. 06079.
Standalone Document 7	Groundwater Monitoring Plan, administrative record no. 06080.
Standalone Document 8	Bulk Liquid Storage/Treatment Plan, administrative record no. 06081.
Standalone Document 9	Container Storage Design and Operations Plan, administrative record no. 06082.
Standalone Document 10	Stabilization/Chemical Treatment Plan, administrative record no. 06083.

Table X-4 (REV.19)
Detection Monitoring Criteria

Volatile Organic Constituents	Criterion (µg/L)¹
Benzene	1
Bromodichloromethane	1
Bromoform	1
Bromomethane	2
Carbon disulfide	1
Carbon tetrachloride	1
Chlorobenzene	1
Chlorodibromomethane	1
Chloroethane	2
Chloroform	1
Chloromethane	2
Dichlorodifluoromethane	2
Dichloroethane, 1,1-	1
Dichloroethane, 1,2-	1
Dichloroethene, 1,1-	1
Dichloroethene, trans-1,2-	1
Dichloropropane, 1,2-	1
Dichloropropene, cis-1,3-	1
Dichloropropene, trans-1,3-	1
Dioxane, 1,4	20
Ethyl benzene	1
Hexachlorobutadiene	1
Methylene chloride	5
Tetrachloroethane, 1,1,2,2-	1
Tetrachloroethene	1
Toluene	1
Trichloroethane, 1,1,1-	1
Trichloroethane, 1,1,2-	1
Trichloroethene	1
Trichlorofluoromethane	2
Vinyl chloride	1

Table X-4 (cont) Detection Monitoring Criteria

Constituents	Criterion (µg/L)	¹ TSCA
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Aroclor 1016	1 µg/L	
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Aroclor 1221	1 µg/L	
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Aroclor 1232	1 µg/L	
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Aroclor 1242	1 µg/L	
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Aroclor 1248	1 µg/L	
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Aroclor 1254	1 µg/L	
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Aroclor 1260	1 µg/L	
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Samples shall be collected, analyzed, and evaluated in accordance with the Permitand Standalone Document No.7, Groundwater Monitoring Plan.

¹The criterion listed in this table for each constituent is the reporting

limits specified in Standalone Document No. 7. Reporting limits shown in this table assume that no sample dilution is necessary. Actual reporting limits may be higher if dilution is necessary or blank contamination is detected.

XI. GROUNDWATER COMPLIANCE MONITORING PROGRAM‡ Rev. 15

XI.A. Monitoring Well Locations

XI.A.1. If a groundwater compliance monitoring program is established as provided in Article X, the Permittee shall maintain a groundwater compliance monitoring program as specified below at the locations for compliance monitoring that are listed in Table XI-1 of this Permit and displayed on Figure 1 of this Permit.

XI.B Well Construction, Maintenance, Replacement and Decommissioning

XI.B.1. The Permittee shall maintain the monitoring wells identified in Permit Condition XI.A.1. in accordance with the Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] .

XI.B.2. All new and replacement monitoring wells shall be drilled and constructed as approved by the Department. A well installation work plan shall be submitted to the Department, for approval, for all new and replacement monitoring wells. The Permittee may not begin drilling until Department approval has been granted. All new and replacement monitoring wells shall be designed, constructed, and installed in accordance with Oregon Water Resources Department rules OAR 690-240; and as appropriate, in general accordance with current guidance from the Department and the EPA for drilling and construction of groundwater monitoring wells. Minor changes to the well installation work plan shall not be considered a Permit modification.

The Permittee shall take all reasonable precautions during drilling to prevent cross contamination between any water-bearing hydrologic zone and the geologic zones overlying and underlying the hydrologic zone.

XI.B.3. The Permittee shall maintain all monitoring wells in good working order, making necessary repairs in a timely manner so that sampling activities do not occur outside the sampling timeframes specified in Permit Condition XI.C.1.a. The Permittee shall maintain an adequate supply of replacement parts and repair equipment so that each groundwater sampling event [as defined in Permit Condition XI.C.1.a.] is not unreasonably delayed. The Permittee shall maintain a list of spare parts and equipment that will fulfill the terms of this Permit Condition. This list shall be approved by the Department. The Department's approval under this Permit Condition shall not be considered a permit modification.

XI.B.4. The Permittee shall follow the procedures in Table 3-2 of the Standalone Document No. 3, Inspection Plan [A.R. 06080], and in Section 3.4 of Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080], for routine inspection of monitoring wells.

XI.B.5. The Permittee shall maintain borehole integrity of each monitoring well identified in Permit Condition XI.A.1, as required by 40 CFR 264.97(c).

XI.B.6. Any replacement monitoring wells that may be required during the life of this Permit shall be installed as close as appropriate and practicable to the monitoring well being taken out of service. If a monitoring well shall be replaced for any reason during the term of this Permit, it shall be replaced within 90 calendar days of the date taken out of service unless the Department approves a longer time period.

XI.B.7. All new or replacement groundwater sampling pumps shall be dedicated bladder pumps unless the Department approves use of another type of pump or sampling device in writing. The Department's approval under this Permit Condition shall not be considered a permit modification.

XI.B.8. All monitoring wells that require decommissioning shall be decommissioned in accordance with Oregon Water Resources Department rules OAR 690-240 and, as appropriate, in general accordance with current guidance from the Department and Environmental Protection Agency for decommissioning of groundwater monitoring wells. Written approval for monitoring well decommissioning is required from the Department. Monitoring well decommissioning documentation, as required by OAR 690-240-0510(6), shall be submitted to the Department within 60 calendar days after completion of decommissioning.

XI.B.9. By written direction from the Department, the Permittee shall decommission monitoring wells identified in Permit Condition XI.A.1. that do not meet the requirements in 40 CFR 264.97(c). In determining whether to issue the written direction, the Department will consider the Permittee's evaluation, if any, for whether the monitoring well meets the requirements in 40 CFR 264.97(c).

XI.B.10. The Permittee shall submit to the Department within 60 calendar days of installation of any new or replacement monitoring well (or group of monitoring wells), or decommissioning of an existing monitoring well (or group of monitoring wells), revised versions of Table XI-1 and Figure 1. The Permittee shall obtain a Permit modification for any new or replacement monitoring well.

XI.C. Program Operation

XI.C.1. Groundwater Sampling and Analysis

XI.C.1.a. The Permittee shall obtain water quality samples from each compliance monitoring well listed in Table XI-1 of this Permit and displayed as a compliance monitoring well on Figure 1 of this Permit, at the frequencies designated on Table XI-1 of this Permit, in

accordance with the procedures in the Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080]. Semiannual groundwater sampling events shall be started and finished in the months of March through May, and September through November, respectively, during each calendar year. The Permittee shall notify the Department within five (5) working days prior to the sampling event.

XI.C.1.b. The Permittee shall analyze all groundwater samples obtained under Permit Condition XI.C.1.a. for the constituents and parameters listed in Tables XI-2 and XI-3 of this Permit, using procedures specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

XI.C.1.c. The Permittee shall triennially analyze the groundwater sampled from the compliance monitoring well with the highest total VOC concentration during the previous sampling event for all 40 CFR 264, Appendix IX constituents. Triennial sampling shall occur upon the commencement of compliance monitoring and every third year thereafter during the compliance period.

XI.C.1.c.i. If any Appendix IX constituents are detected above the applicable detection monitoring criteria as specified in Permit Conditions X.D.1.a. and X.D.1.b. and these constituents are not already designated for compliance monitoring and listed in Tables XI-2 or XI-3 of this Permit, the Permittee may resample within 30 calendar days after receipt of the analytical laboratory's quality-assured data report and repeat the Appendix IX analysis for any new constituents not listed in Tables XI-2 or XI-3 that are detected above the applicable detection monitoring criteria. If the second analysis confirms the presence of new constituents above the applicable detection monitoring criteria, the Permittee shall report the concentrations of these detected constituents to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the second analysis.

XI.C.1.c.ii. If the Permittee chooses not to resample, then the Permittee shall report the concentrations of the additional constituents detected above the applicable detection monitoring criteria to the Department within 7 calendar days after receipt of the analytical laboratory's quality-assured data report for the initial Appendix IX samples collected under Permit condition XI.C.1.c.

XI.C.1.c.iii. The Permittee shall add any newly identified Appendix IX constituents under Permit Conditions XI.C.1.c.i. and XI.C.1.c.ii. to Table XI-3, if the concentration is above the applicable detection monitoring criteria, and submit the revised Table XI-3 to the Department for inclusion into the Permit. For any new Appendix IX constituents without a groundwater concentration limit in Table XI-4, the Permittee shall develop a groundwater concentration limit modifying the Permit in accordance with 40 CFR 270.42.

XI.C.1.d. Results of all analyses, including semiannual analyses, annual analyses, verification analyses, and Appendix IX analyses, shall be submitted to the Department within 45 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report. In no case shall the period between the last date of sampling and the date of submission to the Department of analytical results exceed 90 calendar days unless the Department approves a longer time period. The Permittee shall document when the analytical laboratory's quality-assured data reports are received. The report submitted to the Department shall contain laboratory quality-assured results (as specified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] reported down to the method detection limit (MDL), and the reporting limit (RL) as specified in Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080]. The MDL results are for informational purposes and will be discussed in the reports for each sampling event, as described in Standalone Document No.7, Groundwater Monitoring Plan [A.R. 06080].

XI.C.1.e. Semiannual groundwater monitoring reports shall also include the information listed in Section 7.2 of Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080].

XI.C.1.f. The Permittee shall enter all monitoring, testing, and quality-assured analytical data obtained pursuant to Permit Condition XI.C. in the operating record as required by Permit Condition I.M. Upon written request by the Department, these results shall be submitted within 30 calendar days after the Permittee's receipt of the request, provided the Permittee has received the analytical laboratory's quality-assured data report.

XI.D. Data Evaluation

XI.D.1. Groundwater Concentration Limit -For each hazardous constituent detected above the applicable detection monitoring criterion from results of analyses obtained pursuant to Permit Condition XI.C.1., the Permittee shall determine if the groundwater concentration limit has been exceeded at any compliance monitoring well at the point of compliance using the following procedures:

XI.D.1.a. Determine if the observed concentration of any constituent listed in Tables XI-2 and XI-3 of the Permit exceeds the groundwater concentration limit listed in Table XI-4 of the Permit for that constituent;_

XI.D.1.b.

[Reserved]

XI.D.1.c. Cumulative Carcinogenic Risk Evaluation -Determine if the carcinogenic health risk associated with those detected hazardous constituents listed in Tables XI-2 and XI-3 of the Permit that are denoted as carcinogens ("C" Risk Category) contribute a cumulative risk greater than 1×10^{-5} . For the purposes of determining compliance with this condition, the Permittee shall compute the ratio of the detected concentration of the hazardous constituent divided by the risk based concentration for the hazardous constituent shown in Table XI-4. The Permittee shall determine if the Risk Index exceeds ten using Equation 1; and

XI.D.1.d. Cumulative Toxicity Risk Evaluation -Determine if the toxicity associated with those detected hazardous constituents listed in Tables XI-2 and XI-3 of the Permit that are denoted as non-carcinogenic ("Tox" Risk Category) systemic toxicants contribute an aggregate hazard quotient (HQ) greater than one. For the purposes of determining compliance with this condition, the Permittee shall compute the individual constituent hazard index (HI) for those detected hazardous constituents by dividing the detected concentration of the hazardous constituent by the risk-based concentration for the hazardous constituent shown in Table XI-4. The Permittee shall determine if the Risk Index exceeds one using Equation 1.

Equation 1

$$RI = \frac{C_1}{RBC_1} + \frac{C_2}{RBC_2} + \dots + \frac{C_n}{RBC_n}$$

where, RI = Risk Index
 C_n = Concentration of the nth constituent in groundwater (mg/L)
 RBC_n = Risk-based concentration for the nth constituent in groundwater (mg/L)

With Department approval, the Permittee may group detected hazardous constituents by similar toxic endpoints and perform the determination in Equation 1 separately for each group of detected hazardous constituents with similar toxic endpoints.

XI.D.2. [Reserved]

XI.D.3.

[Reserved]

XI.D.4. Upon a determination of hazardous constituents in any monitoring well exceeding the groundwater concentration limits as specified in Permit Condition XI.D.1., the Permittee shall:

XI.D.4.a. Notify the Department of this finding in writing, within 7 calendar days after receipt of the analytical laboratory's quality-assured data report [40 CFR 264.99(h)1]; and,

XI.D.4.b. Within 30 calendar days after this finding, collect two verification samples from any affected monitoring well(s), following the procedures identified in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080], and reanalyze the samples for all constituents that exceeded the limits as specified in Permit Condition XI.D.1. In no case shall the period between the date of the determination under Permit Condition XI.D.4. and the date of the submission to the Department of the analytical results for the sampling under this Permit Condition exceed 135 calendar days unless a written extension is granted by the Department._

XI.D.4.c. The Permittee may elect to forgo verification sampling activities described under Permit Condition XI.D.4.b. and instead follow the requirements of Permit Condition XI.D.6.

XI.D.5. If the analytical laboratory's quality-assured data results from the analyses in Permit Condition XI.D.4.b. show that:

XI.D.5.a. The verification samples do not confirm the detection of hazardous constituents above the limits as specified in Permit Condition XI.D.1., the Permittee shall resume compliance monitoring according to the schedule in Permit Condition XI.C.1., need take

no action under Permit Condition XI.D.6., and shall notify the Department in writing that the compliance monitoring program is being resumed; or

XI.D.5.b. One or both verification samples confirm the detection of constituents above the limits as specified in Permit Condition XI.D.1, the Permittee shall follow the requirements of Permit Condition XI.D.6.

XI.D.6. The Permittee shall either:

XI.D.6.a. Notify the Department in writing within 7 calendar days of determining that the groundwater concentration limit as specified in Permit Condition XI.D.1. has been exceeded at any compliance monitoring well as determined by Permit Condition XI.D.4. or XI.D.5.b., as appropriate. The notification shall indicate which limits have been exceeded. [40 CFR 264.99(h)(1)] The Permittee shall also follow the requirements specified in Permit Condition XI.D.8. or XI.E., as appropriate; or,

XI.D.6.b. Submit to the Department a report demonstrating that a source other than a regulated unit or past practice unit caused the exceedance, or that the exceedance is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater; and in addition, when required or as provided by 40 CFR 264.99(i), an application for a permit modification to make any appropriate changes to the compliance monitoring program including changes to the groundwater concentration limits for which there was an exceedance. If the Permittee has performed verification sampling under Permit Condition XI.D.4.b., then the report shall be submitted within 90 calendar days after the Permittee's receipt of the analytical laboratory's quality-assured data report under Permit Condition XI.D.5.b. If the Permittee has elected to forgo verification sampling in accordance with Permit Condition XI.D.4.c., the report shall then be submitted within 90 calendar days after the Permittee's receipt of the analytical

laboratory's quality-assured data report for the samples collected under Permit Condition

XI.C.1.a.

XI.D.7. If the Department determines that a report submitted in accordance with Permit Condition XI.D.6.b. fails to identify a source of contamination other than a regulated unit or past practice unit, or that the exceedance is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater or that any application for a permit modification to make changes to the groundwater concentration limits for which there was an exceedance has been denied, then the Permittee shall follow the requirements in Permit Condition XI.E. if the groundwater concentration limit(s) as specified in Permit Condition XI.D.1. is exceeded.

XI.E. Corrective Action Process

XI.E.1. Upon exceedance of the groundwater concentration limit(s), as determined under the process in Permit Conditions XI.D.4. through XI.D.7., the Permittee shall send a written request to the Department's Eastern Region Environmental Cleanup Manager requesting a meeting. The written request shall be sent within 15 calendar days after the notification date in Permit Condition XI.D.6.a. or the determination of the Department in Permit Condition XI.D.7. The written request shall also contain the following information:

XI.E.1.a. Description of release with information known to date,

XI.E.1.b. Description of Permittee's obligation to notify the Environmental Cleanup Manager about the release in accordance with this Permit, and

XI.E.1.c. Description of Permittee's duty to initiate corrective action in accordance with this Permit if any groundwater concentration limit(s) is exceeded.

XI.E.2. The Permittee shall meet with the Department's Eastern Region Environmental Cleanup Program within 45 calendar days after the date on the written notification sent in accordance with Permit Condition XI.E.1. unless the Department approves a longer time period. Such a meeting is intended to initiate development of a corrective action written agreement for the Facility.

XI.E.3. The Permittee shall enter into a written agreement with the Department's Eastern Region Environmental Cleanup Program within 180 calendar days after the date on the written notification sent in accordance with Permit Condition XI.E.1. The agreement shall provide that any corrective action be implemented under OAR 340-122. The agreement shall also provide that in the event of disagreement between the Permittee and Department regarding whether any action under the agreement is consistent with or exceeds 40 CFR 264.90 to 264.101, the Permittee and Department shall make a good faith effort to resolve the dispute by taking the following actions: a) discussing the dispute between the Permittee's Environmental Manager and the Department's Project Manager, b) if necessary, referring the dispute for resolution to the Permittee's Facility Manager and the Department's Cleanup Manager; and c) if necessary, providing each other their respective positions in writing and referring the dispute for resolution by the Department's Eastern Region Administrator, in consultation with the Permittee's Market Area Manager ‡ **Rev. 3.**

XI.E.4. The agreement entered into under Permit Condition XI.E.3. shall be processed as a Class 3 Permit modification and shall be considered an enforceable Condition of this Permit.

XI.E.5.

During the course of the corrective action agreement, the Department may determine it necessary to revise the agreement or corrective action activities conducted under the agreement. Changes to the agreement, or corrective action activities conducted under the agreement that are implemented after the effective date of this Permit may require a modification to the Permit. The Permittee shall notify the Manager in writing at least 30 days prior to any planned changes to the agreement or corrective action activities conducted under the agreement. Upon notification by the Permittee, the Manager will determine whether or not a Permit modification will be needed. If a Permit modification is needed, the Manager shall so notify the Permittee, and upon receipt of such notice, the Permittee shall proceed with a Permit modification in accordance with the procedures set forth in 40 CFR 270.41 and 270.42, incorporated by reference under OAR 340-100-0002 and as modified by OAR -105-0041 and OAR 340-106-0005. In accordance with 40 CFR 270.42(e), as incorporated by reference under OAR 340-1000002, the Permittee may seek, and the Manager may grant, temporary authorization to implement changes to the agreement or corrective action activities conducted under the agreement prior to the final approval of a Permit Modification.

XI.E.6. The agreement or corrective action activities conducted under the agreement may be modified at any time under the Department's Environmental Cleanup Program authority pursuant to the agreement, provided the Permittee complies with the requirements of

XI.E.5. The Department's Environmental Cleanup Program authority to implement changes to the agreement, or corrective action activities conducted under the agreement, shall not be restricted or hindered by any requirements to modify this Permit. Changes approved under the Department's Environmental Cleanup program authority and implemented by the Permittee shall not be a violation of any condition of this Permit or any requirement to modify this Permit provided the Permittee complies with the requirements of XI.E.5.

XI.E.7 The requirement to modify this Permit to accommodate changes in the agreement or corrective action conducted under the agreement shall not be in any way interpreted or deemed to replace, supersede, supplant, modify, or amend the Permittee's right to dispute resolution under the agreement.

XI.E.8. If, after the conclusion or stabilization of corrective action activities, either the Permittee or the Department determines that the Facility should return to a compliance monitoring program, the Permittee must submit a permit modification request to institute a renewed compliance monitoring program under this Permit.

XI.E.9. For any specific compliance monitoring program that has demonstrated an exceedance of the groundwater concentration limit(s), as determined under the process in Permit Conditions XI.D.4. through XI.D.7., the Permittee shall continue with that specific groundwater compliance monitoring program as specified in Section XI of this Permit until there is a written agreement for corrective action in effect. Unless the corrective action written agreement provides otherwise, the Permittee shall continue the groundwater compliance monitoring program as set forth in Section XI of this Permit after the corrective action agreement is in place.

XI.F. Post Closure Monitoring

XI.F.1. All procedures described in Section XI of this Permit shall apply to the post-closure care period, as well as the active life period of each regulated unit or waste management area.

XI.G. Request for Permit Modification

XI.G.1. If the Permittee determines the compliance monitoring program no longer satisfies the requirements of 40 CFR 264.99, then within 90 calendar days the Permittee shall submit an application for a permit modification to make any appropriate changes to the compliance monitoring program. [40 CFR 264.99(j)]

XI.G.2. If the Permittee demonstrates that concentrations at all compliance

Activity		Risk	BMP
Movement of barges along TTD facility dock	Placement of barges at TTD facility	1. Prop wash 2. Unnecessary turbidity 3. Damage to TTD facility dock and pilings	Transfer and placement of the barges at the TTD facility dock will be performed by the tug contractor using river current and minimum thrus so as not to cause damage to the facility dock and/or pilings, and reduce prop wash and turbidit during movement of the barges
	Movement of barges along TTD facility dock	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 4. Control of barges while moving.	Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care w be taken during barge movement to ensure no damage is caused to the TTD facility dock or pilings. Barges will remain tied to the dock with : minimum of one dock line during fleeting operations. At no time will barges be released a moved away from the dock to facilitate placemer of another barge along the dock, unless the barge and/or pilings, and reduce prop wash and turbidity during movement of the barges
Movement of barges along TTD facility dock	Unloading of dredge material from barges at TTD facility	1. Spill or dripping dredge material on dock 2. Dredge material introduced into site storm water system 3. Spill of dredge material into the river	6 mil poly sheeting will be placed under travel area of the overhead crane and clamshell bucket to capture any drips or dredge material the may fall from the clamshell during transfer of dredge material to containment vault. Dredge material transfer operations will be isolat from the remainder of the facility storm water management system. No storm water or water resulting from cleaning the exterior of haul vehicles will be managed through the on-site WWT facility. In the unlikely event dredge
	Unloading of dredge material from barges at TTD facility	1. Damage to dock and pilings 2. Prop wash 3. Unnecessary turbidity 4. Control of barges while moving.	Barges will be moved along the dock using the water front crane to eliminate the risk of prop wash and unnecessary turbidity. Care will be taken during barge movement to ensure no damage is caused to the TTD facility dock or pilings. Barges will remain tied to the dock with a minimum of one dock line during fleeting operations. At no time will barges be released and moved away from the dock to facilitate placement of another barge along the dock, unless the barge is

monitoring wells identified in Table XI-1 of the Permit are below the detection monitoring criteria as specified in Permit Condition X.D.1. for a period of three consecutive years, the Permittee may submit an application for a permit modification to modify the groundwater compliance monitoring program.

Chemical Abstract Services

² These groundwater concentration limits for organic hazardous constituents are based on one percent of the aqueous solubility limit for each hazardous constituent and are used as alternate concentration limits (ACLs) under 40 CFR 264.98. Where one percent of the aqueous solubility limit for a hazardous constituent exceeds the ACL (without the 10 percent safety factor) as determined in *Demonstration Report: Development of Site-wide Alternate Concentration Limits in Groundwater* (CWM and CH2M Hill 2007), the determined ACL is used (shown with an asterisk * in the table). Also, where one percent of the aqueous solubility limit for a hazardous constituent is less than the reporting limit for the hazardous constituent, the reporting limit is used (shown with two asterisks ** in the table). The groundwater concentration limits for inorganic hazardous constituents are the ACLs (without the 10 percent safety factor and capped at one million parts per million where necessary).³ C = Carcinogenic; Tox = Noncarcinogenic (i.e., systemic toxicant)⁴ The risk-based concentrations for the Selah Member are based on the RBC for carcinogenic and non-carcinogenic ACLs, whichever is the lower concentration limit, times the 10 percent safety factor. These values will be used, if compliance monitoring becomes necessary, to assess the cumulative risk posed by detected constituents in groundwater. The values are not artificially capped because doing so would bias the cumulative risk calculation and not allow an accurate evaluation of cumulative risk to be completed.

XII. CORRECTIVE ACTION

All historic hazardous waste operations at Permittee's Facility have been authorized and regulated by the Department pursuant to permits. Both EPA and the Department have investigated and evaluated the Permittee's Facility for the presence of any unidentified solid waste management unit (SWMU) including from December 1985 through April 1989 and in 2002. Neither EPA nor the Department has identified the presence of a SWMU that has not been regulated by this Permit or previous permit issuance. Permit Conditions in this Section XII are included as a precautionary matter should a new

SWMU be identified in the future. ‡ **Rev. 3**

XII.A Standard Conditions

XII.A.1. ORS 466.105(10) and 40 CFR 264.101 require that hazardous waste Permits address corrective action for releases of hazardous wastes including hazardous constituents from any solid waste management unit (SWMU) at the Facility, regardless of when the waste was placed in the unit.

XII.A.2. All future plans and schedules required by this section of this Permit, including plans and schedules pursuant to Permit Condition XII.A.5., are upon approval by the Department, incorporated into this Permit by reference. Extensions of the due dates for submittals may be granted by the Manager either in writing or in accordance with 40 CFR 270.41 or 40 CFR 270.42.

XII.A.3.

[Reserved]

XII.A.4.a. Any release of a hazardous constituent into the environment from any solid waste

management units (SWMUs) which is not a Permitted unit or a past practice unit, as defined in Permit Condition IX.A, shall require the Permittee to notify in writing the Department's Eastern Region Hazardous Waste Program Manager within 15 days of discovery.

XII.A.4.b. The Department shall review the notification and provide an opportunity for the Permittee to comment before deciding if the release should be referred to the Department's Eastern Region Clean-up program. ‡ **Rev. 3**

XII.A.5. All referred corrective action activity initiated from Permit Condition XII.A. 4. shall be implemented by the Department's Clean-up Program pursuant to an agreement with provisions as set forth in Permit Condition X.E.3. ‡ **Rev. 3**

XII.B NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-- IDENTIFIED SOLID WASTE MANAGEMENT UNITS

XII.B.1. The Permittee shall notify the Hazardous Waste Program Manager of any newly-identified SWMU found at the Facility which is not a SWMU previously identified in the administrative record. Such written notification shall be made within 15 days of discovery.

XII.B.2. After such notification, the Hazardous Waste Manager may request in writing that the Permittee prepare a SWMU Assessment Plan and a proposed schedule of implementation and completion of the Plan for any newly-identified SWMU discovered after the effective date of this Permit. The Permittee shall submit the SWMU Assessment Plan to the Department's Eastern Region Hazardous Waste Manager.

XII.B. 3. After the Permittee submits the SWMU Assessment Plan, the Eastern Region Hazardous Waste Manager shall either approve or disapprove the Plan in writing. If the Manager approves the Plan, the Permittee shall begin to implement the Plan within 30 calendar days after receiving such written approval. If the Manager disapproves the Plan, the Manager shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan. If the Manager approves the revised Plan the Permittee shall implement the Plan after 30 calendar days of receiving written approval. The Manager's approval of a plan shall not be considered a modification of this Permit.

XII.C. Additional Corrective Action Permit Conditions

XII.C.1. Unless otherwise approved by the Department after consultation with the Permittee, prior to decommissioning any monitoring well or piezometer that is not routinely sampled in the detection or compliance monitoring programs at the Facility, the Permittee shall assess the potential for the monitoring well or piezometer to have acted as a vertical conduit for migration of contamination from the vadose zone to groundwater. This assessment shall consider, at a minimum, the proximity of the monitoring well or piezometer to unlined landfill areas and previously closed Solid Waste Management Units. If the Department reasonably determines based on the above assessment that a potential exists for migration of contamination from the vadose zone to groundwater, the Permittee shall collect a groundwater sample from the monitoring well or piezometer to be decommissioned in accordance with procedures in Standalone Document No. 7, Groundwater Monitoring Plan [A.R. 06080] and analyze the sample for the constituents and parameters listed in Table IX-3 and report the analytical results to the Department.

XIII. AMENDMENTS TO STANDALONE DOCUMENTS

XIII.A. Amendments to the Waste Analysis Plan [Standalone No. 1]

‡ **Rev. 4**

XIII.B. Amendments to the Security Procedures, Hazard Prevention, Training Plan [Standalone No. 2] [Reserved]

XIII.C. Amendments to the Inspection Plan [Standalone No. 3]

XIII.C.1.

‡ **Rev. 4**

XIII.D. Amendments to the Contingency Plan [Standalone No. 4] [Reserved]

XIII.E. Amendments to the Closure/Post-Closure Plan, Cost Estimates, Financial Assurance, Insurance [Standalone No. 5] [Reserved]

XIII.F. Amendments to the Surface Water Management Plan [Standalone No. 6] [Reserved]

XIII.G. Amendments to the Groundwater Monitoring Plan [Standalone No. 7] [Reserved]

XIII.H. Amendments to the Bulk Liquid Storage/Treatment Plan, [Standalone No. 8] [Reserved]

XIII.I. Amendments to the Container Storage Design and Operations Plan [Standalone No. 9]
[Reserved]

XIII.J. Amendments to the Stabilization/Chemical Treatment Plan [Standalone No. 10]
[Reserved]

XIII.K. Amendments to the Debris Treatment Plan [Standalone No. 11]
[Reserved]

XIII.L. Amendments to the Containment Building Design and Operations Plan
[Standalone No. 12]

XIII.L.1. ‡ **Rev. 4**

XIII.L.2. ‡ **Rev. 4**

XIII.M. Amendments to the Surface Impoundments Design and Operations Plan
[Standalone No. 13] [Reserved]

XIII.N. Amendments to the Landfill Design and Operations Plan [Standalone No. 14]
[Reserved]

XIII.O. Amendments to the Landfill Response Action Plans [Standalone No. 15]
[Reserved]

XIII.P. Amendments to the Construction Quality Assurance Plan [Standalone No. 16]

XIII.P.1. Before any additional landfill L-14 cells are constructed, or and new lined hazardous waste unit is constructed, the Permittee shall submit a project-specific Quality

Assurance Plan (QAP), as described in Section 1.1 in Standalone Document No. 16, in accordance with 40 CFR 270.42. No construction may begin until the Department approves the modification.

XIII.P.2. The Permittee may only use a Geosynthetic Installer, as described in section 1.2.5 of Standalone Document No. 16, that has a minimum experience of installing 10,000,000 ft² of geosynthetic material.

XIII.P.3. Before the Permittee constructs an engineered soil liner, using soils that are different, or characteristically different, than the soil liners at landfill L-12 or L-13, the Permittee shall submit for Department approval an in-situ permeability test in accordance with 40 CFR 270.42. The Permittee may not begin emplacement of the soil liner until the Department approves in writing the results of the in-situ test.

XIII.P.4. Regardless of any statement in Standalone Document No. 16, the Permittee shall include in project-specific QAPs (as described in section 1.1 of Standalone Document No. 16) mandatory conformance testing for all geosynthetic materials used in the project.

XIII.P.5. Section 9.7.4A on page 9-11A of Standalone Document No. 16 Construction Quality Assurance Plan, first paragraph, second sentence, shall read, "Such trial seams shall be made at the beginning of each seaming period, and at least once each five hours, for each production seaming apparatus and for each seaming personnel used that day."

XIII.P.6. Section 9.9.2A on page 9-16A of Standalone Document No. 16, Construction Quality Assurance Plan, first bulleted item, shall read, "A minimum frequency of one test

location per 500 ft (152 m) of production seam length performed by each welding machine. This frequency is to be determined as an average taken throughout the entire facility.”

XIII.P.7. Section 13.7 on page 13.7 of Standalone Document No. 16 Construction Quality Assurance Plan, last paragraph, third sentence, shall read, “The hydrated material shall be covered with new dry GCL material, removed and replaced with new dry GCL material.”

XIII.Q. Amendments to the Landfill Final Cover Design Plan [Standalone No. 17]
[Reserved]

XIII.R. Amendments to the Landfill Design Drawings [Standalone No. 18]
[Reserved]

XIII.S. Amendments to the Bioremediation Facility and Organic Recovery Unit Design and Operations Plan [Standalone No. 19]

XIII.S.1

‡ **Rev. 4**

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XIV. PCB DISPOSAL PERMIT

XIV.A. PCB Disposal Permit Facility Establishment This section of the hazardous waste document is a separate PCB disposal facility permit from the hazardous waste Permit in Sections I through XII. Attached to the Hazardous Waste Permit, this Section XIV is the Permit for PCB storage, treatment and disposal at the Chemical Waste Management of the Northwest, Inc., facility located near Arlington in Gilliam County. This PCB disposal facility permit could have been issued as a separate document, but, for efficiency, it is attached to the hazardous waste permit so that the requirements for storage, treatment and disposal of hazardous waste and storage, treatment and disposal of PCB are in one volume.

This PCB disposal facility Permit is issued in accordance with ORS 466.065 and 466.250 through 466.355, and the rules promulgated at OAR Chapter 340 Division 110 and consistent with the Toxic Substance Control Act and the regulations promulgated at 40 CFR Part 761. This permit issuance terminates permit license HW-1 issued in 1980.

This Permit shall be identified as PCB-1 and is effective as of August 21, 2006, and shall remain in effect until August 21, 2016, unless revoked and reissued, terminated, or continued in accordance with OAR 340-105-0051.

Issued To:

Chemical Waste Management of the Northwest, Inc. 17629
Cedar Springs Lane

Arlington, OR 97812 Issued By:

Lynn Hampton, Chair Date Oregon Environmental Quality Commission

Joni Hammond, Regional Administrator Date Oregon Department of Environmental
Quality

DEQ Issued



State of Oregon
Department of
Environmental
Quality

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DEQ Issued

XIV.B. Standard Conditions

XIV.B.1. Effect of Permit The Permittee is authorized to store, to treat and to dispose PCB or PCB items in accordance with the Conditions of this Permit. Any disposal of PCB or PCB items by the Permittee at this Facility that is not authorized by this Permit and for which a Permit is required under Section 6 of TSCA and ORS 466.255 is prohibited. The definitions found in OAR 340-100-0010 and OAR 340-110-0003 are incorporated into this Permit.

XIV.B.2. Personal and Property Rights This Permit does not convey any property rights of any sort, or any exclusive privilege, nor does this Permit authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local laws or regulations.

XIV.B. 3. Permit Actions

XIV.B.3.a. This Permit may be modified, revoked and reissued, or terminated for cause by the Department as specified in 40 CFR 270.41, 270.42, 270.43, and OAR 340 Divisions 105 and 106.

XIV.B.3.b. The filing of a request for a Permit modification, or revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance on the part of the Permittee shall not stay the applicability or enforceability of any Permit Condition except as provided in 40 CFR 270.41, 270.42, 270.43, and OAR Divisions 105 and 106.

XIV.B.4. Severability

XIV.B.4.a. The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. Invalidation of any state or federal statutory or regulatory provision, which forms the basis for any condition of this Permit, does not affect the validity of any other state or federal statutory or regulatory basis for said condition.

XIV.B.4.b. In the event that a Condition of this Permit is stayed for any reason, the Permittee shall continue to comply with the related applicable and relevant conditions found in the previously expired permit until final resolution of the stayed Condition unless compliance with the related applicable and relevant conditions in the previously expired-permit would be technologically incompatible with compliance with other conditions of this Permit, which have not been stayed.

XIV.B.5. Duty to Comply

XIV.B.5.a. The Permittee shall comply with all Conditions of this Permit, except that the Permittee need not comply with the Conditions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit issued by the Department or Environmental Protection Agency. Any Permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the applicable provision of Oregon State law or rule and is grounds for enforcement action, Permit termination, modification or revocation and reissuance of the Permit, or denial of a Permit renewal application.

XIV.B.5.b. Compliance with the terms of the Permit does not constitute a defense to any action brought under ORS 459, 465, 466.180, 466.185, 466.190, 466.200, 466.210, 466.225,,

or Sections 3007, 3008, 3013 and 7003 of RCRA (42 U.S.C. 6934 and 6973), Section 7 of the Toxic Substances Control Act (TSCA), or Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. 9606(a)], as amended by the Superfund Amendments and Reauthorization Act of 1986, or any other federal or state law governing protection of public health or the environment from any imminent and substantial endangerment to human health or the environment.

However, compliance with the terms of this Permit does constitute a defense to any action alleging failure to comply with the applicable law upon which this Permit is based.

‡ Rev. 3

XIV.B.6. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new Permit, utilizing 40 CFR 270.30(b). The Permittee shall submit such Permit application at least 180 calendar days prior to the expiration date of this Permit, unless the Manager has granted permission for a later date (but no later than the expiration date of the existing Permit) in accordance with 40 CFR 270.10(h).

XIV.B.7. Continuation of Expiring Permit

This Permit, all Conditions herein and Standalone Documents No. 20, PCB Operations Plan, shall continue in force until the effective date of a new Permit if the Permittee has submitted a timely, complete application, and, through no fault of the Permittee, the Commission does not issue a new Permit under 40 CFR 124.15 on or before the expiration date of the previous Permit.

XIV.B.8. Need to Halt or Reduce Activity Not Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the Conditions of this Permit.

XIV.B.9. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

XIV.B.10. Proper Operation and Maintenance

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee so as to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This Condition requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the Conditions of this Permit.

XIV.B.11. Duty to Provide Information

The Permittee shall furnish to the Manager, or his designee, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Manager and Inspector, upon request, copies of records required to be kept by this Permit.

XIV.B.12. Inspection and Entry

The Permittee shall allow the Department, or its authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

XIV.B.12.a. Enter at reasonable times upon the Permittee's premises where regulated PCB management units or activities are located or conducted, or where records shall be kept under the Conditions of this Permit;

XIV.B.12.b. Have access to and copy, at reasonable times, any records that shall be kept under the Conditions of this Permit;

XIV.B.12.c. Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

XIV.B.12.d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by TSCA or Oregon Law, any substances or parameters at any PCB Disposal Facility location.

XIV.B.13. Monitoring and Records

The Permittee will monitor and record PCB disposal activities in accordance with 40 CFR 761.75(b)(8)(iv) and 40 CFR 761.180(b), (d) and (f) and Standalone Document No. 20, PCB Operations Plan [A.R. 06093].

XIV.B.14. Reporting Planned Changes

The Permittee shall give notice to the Manager, as soon as possible of any planned physical alterations or additions to the permitted PCB Disposal Facility.

XIV.B.15. Anticipated Noncompliance

The Permittee shall give advance notice to the Manager of any planned changes in the permitted PCB Disposal Facility or activity that might result in noncompliance with Permit requirements.

XIV.B.16. Transfer of Permit

This Permit is personal to the Permittee and is transferable only in accordance with OAR 340-110-0075.

XIV.B.17. Twenty-four Hour Reporting

XIV.B.17.a. The Permittee shall verbally report to the Manager or Inspector, any PCB noncompliance with this Permit which may endanger health or the environment, within 24 hours from the time the Permittee becomes aware of the noncompliance. The report shall include:

XIV.B.17.b. Information concerning release of any PCB waste that might cause an endangerment to public drinking water supplies; and,

XIV.B.17.c. Any information of a release or discharge of PCB waste or of a fire or explosion from the PCB Disposal Facility that might threaten human health or the environment. The

description of the occurrence shall include the information requirements in Permit Condition I.T.2.

XIV.B.18. Other Noncompliance

The Permittee shall report to the Manager all other instances of PCB noncompliance with this Permit not otherwise reported at the time monitoring reports are submitted.

XIV.B.19. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant PCB facts in the Permit application, or submitted incorrect information in the Permit application or in any report to the Manager or Inspector, the Permittee shall promptly submit such facts or corrected information to the appropriate persons.

XIV.B.20. Signature and Certification

All written applications, reports required by this Permit and other information requested by the Manager, when submitted to the Manager, or Inspector, by the Permittee shall be signed and certified as required by 40 CFR Part 761 in accordance with 40 CFR 761.3.

XIV.B.21 Confidential Information

Information submitted by the Permittee to the Manager or Inspector that is claimed as trade secret, confidential, or confidential business information by the Permittee will be handled in accordance with the applicable provisions of OAR 340-100-0003.

XIV.B.22. Fees

The Permittee shall pay fees as required under ORS 466.325, 466.345, 466.350 and as promulgated at OAR 340-105, and other state statutes and related rules. This Condition

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does not preclude the Permittee from challenging any future promulgation or adoption of a statute, rule, or administrative action imposing any fee on the Permittee.

XIV.C. Storage, Treatment, And Disposal Standards

XIV.C.1. This Permit hereby incorporates into this PCB Permit by reference Standalone Document No. 20 PCB Operation Plan [A.R. 06093].

XIV.C.2. All notifications and correspondence sent to the Environmental Protection Agency, in accordance with the PCB Operation Plan, shall also be sent to the Department of Environmental Quality Eastern Region Hazardous Waste Manager.

XIV.D. Requirement for Groundwater Monitoring or Waiver

The Permittee shall not place PCB or PCB items into landfill L-14 until there is an in-place groundwater monitoring system unless a waiver has been issued by the Department in accordance with 40 CFR 761.75(c)(4).

XIV.E. Additional Disposal Requirements

XIV.E.1. The Permittee may dispose of PCB or PCB items only in Landfills L-12, L-13, and L-14.

XIV.E.2. In the event of a PCB spill, the Permittee shall comply with Standalone Document No. 4, Contingency Plan [A.R. 06077].

XIV.E.3. The Permittee shall comply with OAR 340-110-0061(6) regarding waste oils containing PCB.

XIV.E.4. If the Permittee uses containers described in 40 CFR 761.65(c)(7)(i), the Permittee shall have and implement a Spill Prevention Control and Countermeasure plan in accordance with OAR 340-110-0065(2).

XIV.F. Groundwater Monitoring

XIV.F.1. Groundwater monitoring requirements found in Section X of the Hazardous Waste Permit are incorporated and made part of this PCB Permit.

XIV.F.2. The Permittee shall perform the groundwater tasks and procedures as set forth in Section X of the Hazardous Waste Permit in a manner consistent with 40 CFR 761.75(b)(6).

XIV.F.3. The Permittee shall sample and analyze for PCBs, pH, and specific conductance in the groundwater in accordance with Section X of the Hazardous Waste Permit in a manner consistent with 40 CFR 761.75(b).

XIV.G. ORS 466.065 Conditions

XIV.G.1. The Permittee shall not accept for treatment or disposal during the ten-year term of this Permit an amount of PCB more than 110 percent of the PCB treated or disposed by the Facility under any permit without approval of the Department in accordance with ORS 466.065.

XIV.G.2. The Permittee shall comply with all applicable federal and Oregon technological requirements for treating and disposing of PCB.

XIV.G.3. The Permittee shall comply with all applicable Oregon and federal requirements for financial and technical capability to properly construct and operate the PCB disposal Facility [ORS 466.065(4).]

XIV.G.4. The Permittee shall own, or contract with, an emergency response provider or coordinator that can provide for timely response to a PCB spill or release in Oregon of PCB being transported to the Facility by a motor vehicle owned by the Permittee [ORS 466.065(5).]

XIV.G.5. The Permittee shall require that any transporter of PCB hired by the Permittee, owns, or has a contract with, an emergency response provider or coordinator that can provide for timely response to a spill or release in Oregon of PCB being transported by a motor vehicle to the Facility [ORS 466.065(6).]

XIV.G.6. Upon arrival at the facility of any motor vehicle transporting PCB not described in Permit Conditions XIV.G.5. and XIV.G.4., the Permittee shall request to review the transporter's authorization to transport PCB in Oregon and the driver's authorization to drive a motor vehicle transporting PCB in Oregon. The Permittee shall report to the Department the name of any transporter or driver failing to demonstrate the requested authorization [ORS 466.065(7).]

XIV.H. Equivalent Materials/Information If certain equipment, materials, procedures, and administrative information (such as names, phone numbers, addresses, obsolete forms, addition of new forms and to forms,

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deletion from forms of units certified as closed, etc.) are specified in this Permit, the Permittee is allowed to use an equivalent or superior substitute or deletion. Use of such equivalent or superior substitute or deletion shall not be considered a modification of the Permit, but the Permittee shall present the proposed change to the Department, and then with Department approval that the item is equivalent or superior (such approval may be verbal or written) submit to the Department by written letter the revision, accompanied by a narrative explanation, and the date the revision becomes effective which may be the date of the submittal or a later date. The Department may judge the soundness of the revision as to whether the item is equivalent or superior. If the Department determines that the change is not in accordance with the approval, the Department will by letter direct the Permittee to submit the change again. The format of tables or forms is not subject to the requirements of this Permit and may be revised at the Permittee's discretion.

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10.2 Attachment B: Stormwater Permit



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

January 2, 2014

Wilbur Clark
Pacific Pile & Marine LP
700 S Riverside Dr
Seattle, WA 98108

Permit Number: WAR301516
Facility Name: Pacifec Pile & Marine Main Yard
Location: 700 S Riverside Dr
Seattle, WA; King County

RE: Coverage under the Industrial Stormwater General Permit

Dear Mr. Clark:

The Washington State Department of Ecology (Ecology) has reviewed your application for coverage under the Industrial Stormwater General Permit (permit). We are granting coverage under the permit as of January 2, 2014. Retain this letter with your permit. It is the official record of permit coverage for your facility.

Monitoring Requirements:

This permit requires sampling and analysis of stormwater discharged from your facility. Please carefully read this letter, the enclosed Summary of Coverage document, and the attached Discharge Monitoring Report (DMR). You are required to submit a DMR within 45 days of the end of each reporting period, even if stormwater was not discharged or sampled. Your first sampling period will be the 1st Quarter (Jan, Feb, Mar of 2014) and your first DMR must be submitted by May 15, 2014.

1. All permittees are required to sample for turbidity, pH, total zinc, visible oil sheen, and total copper.
2. Certain facilities may be required to sample for additional parameter(s) based on industrial processes, receiving waterbodies, and/or Ecology-ordered additional sampling.

Appeal of Permit Coverage

You have a right to appeal the terms and conditions of a general permit, as they apply to an individual discharger, to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this letter. This appeal is limited to the general permit's applicability or non-applicability to a specific discharger. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).



Wilbur Clark
January 2, 2014
Page 2

To appeal, you must do the following within 30 days of the date of receipt of this letter:

- File your appeal and a copy of the permit cover page with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and the permit cover page on Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

Address and Location Information:

Street Addresses:

Department of Ecology
Attn: Appeals Processing Desk
300 Desmond Drive SE
Lacey, WA 98503

Pollution Control Hearings Board (PCHB)
1111 Israel Road SW, Suite 301
Tumwater, WA 98501

Mailing Addresses:

Department of Ecology
Attn: Appeals Processing Desk
PO Box 47608
Olympia, WA 98504-7608

Pollution Control Hearings Board
PO Box 40903
Olympia, WA 98504-0903

Additional Information

Please include the permit number as printed on page one of this letter in any future correspondence or telephone calls to Ecology. If you still have questions after reviewing your permit or have technical questions regarding stormwater management for your site, contact Robert Wright of Ecology's Northwest Regional Office in Bellevue at robert.wright@ecy.wa.gov, or (425) 649-7060.

There are guidance documents and additional permit information available online at:
<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>.

If you have any questions regarding this letter, contact Josh Klimek at josh.klimek@ecy.wa.gov, or (360) 407-7451.

Sincerely,



Bill Moore, P.E., Manager
Program Development Services Section
Water Quality Program

cc: Ecology Permit Fee Unit, HQ
Stormwater File, HQ

Issuance Date: October 21, 2009
Effective Date: January 1, 2010
Expiration Date: January 1, 2015

Modification Issuance Date: May 16, 2012
Modification Effective Date: July 1, 2012

INDUSTRIAL STORMWATER GENERAL PERMIT

**A National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge
General Permit for Stormwater Discharges Associated With
Industrial Activities**

**State of Washington
Department of Ecology
Olympia, Washington 98504-7600**

**In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.**

**Until this permit expires, is modified or revoked, Permittees that have properly obtained
coverage under this general permit are authorized to discharge in accordance with the special and
general conditions which follow.**


Kelly Susewind, P.E., P.G. Manager
Water Quality Program

Washington State Department of Ecology

TABLE OF CONTENTS

SUMMARY OF PERMIT REPORTS & SUBMITTALS	5
SUMMARY OF REQUIRED ONSITE DOCUMENTATION	5
SPECIAL CONDITIONS	6
S1. PERMIT COVERAGE	6
A. Facilities Required to Seek Coverage Under This General Permit.....	6
B. Significant Contributors of Pollutants	8
C. Facilities Not Required to Obtain Coverage.....	8
D. Facilities Excluded from Coverage.....	9
E. Discharges to Ground	10
F. Conditional "No Exposure" Exemption.....	10
S2. APPLICATION FOR COVERAGE.....	11
A. Obtaining Permit Coverage.....	11
B. Modification of Permit Coverage	11
C. Permit Coverage Timeline	12
D. Transfer of Permit Coverage.....	12
S3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	13
A. General Requirements.....	13
B. Specific SWPPP Requirements.....	14
S4. GENERAL SAMPLING REQUIREMENTS.....	21
A. General Requirements.....	21
B. Sampling Requirements	21
C. Analytical Procedures for Sampling Requirements	24
D. Laboratory Accreditation	24
S5. BENCHMARKS, EFFLUENT LIMITATIONS AND SPECIFIC SAMPLING REQUIREMENTS.....	24
A. Benchmarks and Sampling Requirements	24
B. Additional Sampling Requirements for Specific Industrial Groups	25
C. Stormwater Discharges Subject to Effluent Limitation Guidelines.....	27
D. Conditionally Authorized Non-Stormwater Discharges	28
E. Prohibited Discharges	29
F. General Prohibitions	29
S6. DISCHARGES TO 303(d)-LISTED OR TMDL WATERS	30
A. General Requirements for Discharges to 303(d)-listed Waters	30
B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters	30
C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain 303(d)-listed Waters.....	30

	D. Requirements for Discharges to Waters with Applicable TMDLs	33
S7.	INSPECTIONS	33
	A. Inspection Frequency and Personnel	33
	B. Inspection Components.....	33
	C. Inspection Results	34
	D. Reports of Non-Compliance	34
S8.	CORRECTIVE ACTIONS	35
	A. Implementation of Source Control and Treatment BMPs from Previous Permit	35
	B. Level One Corrective Actions – Operational Source Control BMPs	35
	C. Level Two Corrective Actions – Structural Source Control BMPs.....	35
	D. Level Three Corrective Actions – Treatment BMPs	36
S9.	REPORTING AND RECORDKEEPING	37
	A. Discharge Monitoring Reports.....	37
	B. Annual Reports	38
	C. Records Retention.....	39
	D. Additional Sampling by the Permittee.....	39
	E. Reporting Permit Violations	39
	F. Public Access to SWPPP	40
S10.	COMPLIANCE WITH STANDARDS	40
S11.	PERMIT FEES.....	41
S12.	SOLID AND LIQUID WASTE MANAGEMENT	41
S13.	NOTICE OF TERMINATION (NOT)	41
	A. Conditions for a NOT	41
	B. Procedure for Obtaining Termination	42
	GENERAL CONDITIONS	43
G1.	DISCHARGE VIOLATIONS	43
G2.	SIGNATORY REQUIREMENTS.....	43
G3.	RIGHT OF INSPECTION AND ENTRY	44
G4.	GENERAL PERMIT MODIFICATION AND REVOCATION	44
G5.	REVOCATION OF COVERAGE UNDER THE PERMIT	44
G6.	REPORTING A CAUSE FOR MODIFICATION	45
G7.	COMPLIANCE WITH OTHER LAWS AND STATUTES.....	45

G8.	DUTY TO REAPPLY	45
G9.	REMOVED SUBSTANCES	45
G10.	DUTY TO PROVIDE INFORMATION.....	46
G11.	OTHER REQUIREMENTS OF 40 CFR.....	46
G12.	ADDITIONAL SAMPLING	46
G13.	PENALTIES FOR VIOLATING PERMIT CONDITIONS	46
G14.	UPSET	46
G15.	PROPERTY RIGHTS.....	47
G16.	DUTY TO COMPLY	47
G17.	TOXIC POLLUTANTS.....	47
G18.	PENALTIES FOR TAMPERING	47
G19.	REPORTING PLANNED CHANGES	47
G20.	REPORTING OTHER INFORMATION.....	48
G21.	REPORTING ANTICIPATED NON-COMPLIANCE.....	48
G22.	REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT	48
G23.	APPEALS	49
G24.	SEVERABILITY	49
G25.	BYPASS PROHIBITED.....	49
	APPENDIX 1 - ACRONYMS.....	51
	APPENDIX 2 - DEFINITIONS.....	52
	APPENDIX 3 - SWPPP CERTIFICATION FORM	60
	APPENDIX 4 - EXISTING DISCHARGERS TO IMPAIRED WATER BODIES	61
	APPENDIX 5 - DISCHARGERS SUBJECT TO TMDL REQUIREMENTS	61

SUMMARY OF PERMIT REPORTS & SUBMITTALS

Permit Section	Submittal	Frequency	Due Date(s)
S1.F	Conditional "No Exposure" Certification Form	As necessary	As necessary
S2.B	<i>Application</i> for Permit Coverage	As necessary	As necessary
S2.B.	Request Modification of Permit Coverage	As necessary	As necessary
S2.D	Request Transfer of Coverage	As necessary	As necessary
S9.A	Discharge Monitoring Reports (DMRs)	1/quarter	within 45 days after the end of each quarter
S9.B	Annual Report	1/year	May 15 th (except 2010)
S9.C.	SWPPP, if requested by <i>Ecology</i>	Per <i>Ecology</i> request	Within 14 days of request
S9.E	Noncompliance Notification	As necessary	Within 30 days of noncompliance event

SUMMARY OF REQUIRED ONSITE DOCUMENTATION¹

Permit Condition(s)	Document Title
S3.A.4.a	<i>Stormwater Pollution Prevention Plan (SWPPP)</i> ²
S9.B	Copies of Annual Reports
S9.C.1.a	Copy of Permit
S9.C.1.b	Copy of Permit Coverage Letter
S9.C.1.c	Original Sampling Records (Field Notes and Laboratory Reports)
S7.C & S9.C.1.d	Site Inspection Reports
S9.C.1.j	Copies of Discharge Monitoring Reports (DMRs)

¹ A complete list is contained in Condition S9.C. The permittee shall make all plans, documents and records required by this permit immediately available to Ecology or the local jurisdiction upon request.

² With signed and completed SWPPP Certification Form(s) – see Appendix 3

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Facilities Required to Seek Coverage Under This General Permit

This statewide permit applies to *facilities* conducting *industrial activities* that *discharge stormwater* to a surface water body or to a *storm sewer* system that drains to a surface water body. Beginning on the effective date of this permit and lasting through its expiration date, the Permittee is authorized to *discharge stormwater* and conditionally approved non-stormwater *discharges* to *waters of the state*. All *discharges* and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The permit requires coverage for private entities, state, and *local government* facilities, and includes *existing facilities* and *new facilities*. Facilities conducting industrial activities listed in Table 1 or referenced in S1.A3 shall apply for coverage under this permit or apply for a Conditional No Exposure exemption, if eligible (Condition S1.F). The *Department of Ecology (Ecology)* may also require permit coverage for any *facility* on a case-by-case basis in order to protect *waters of the state* (Condition S1.B).

1. Facilities engaged in any industrial activities in Table 1 shall apply for coverage if *stormwater* from the *facility discharges* to a surface water body, or to a *storm sewer* system that *discharges* to a surface water body. The *Standard Industrial Classification (SIC)* groups generally, but not always, associated with these activities are listed in Table 1.

Table 1: Activities Requiring Permit Coverage and the Associated SIC Code Groups

Industrial Activities	SIC Code
Metal Mining	10xx
Coal Mining	12xx
Oil and Gas Extraction	13xx
Mining and Quarrying of Nonmetallic Minerals, except Fuels (except facilities in SIC Codes 1411, 1422, 1423, 1429, 1442, 1446, 1445, 1459, and 1499; these facilities are covered under the Sand and Gravel General Permit)	14xx
Food and Kindred Products	20xx
Tobacco Products	21xx
Textile Mill Products	22xx
Apparel and Other Finished Products Made from Fabrics and Similar Material	23xx
Lumber and Wood Products	24xx
Furniture and Fixtures	25xx
Paper and Allied Products	26xx
Printing, Publishing and Allied Industries	27xx
Chemicals and Allied Products	28xx
Petroleum Refining and Related Industries (Except facilities in SIC 2951; these facilities are covered under the Sand and Gravel General Permit)	29xx
Rubber and Miscellaneous Products	30xx
Leather and Leather Products	31xx
Stone, Clay, Glass, and Concrete Products (Except facilities in SIC 3272-3273; these	32xx

Industrial Activities	SIC Code
facilities are covered under the Sand and Gravel General Permit)	
Primary Metal Industries	33xx
Fabricated Metal Products	34xx
Industrial and Commercial Machinery and Computer Equipment	35xx
Electronic and Other Electrical Equipment and Components	36xx
Transportation Equipment	37xx
Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks	38xx
Miscellaneous Manufacturing Industries	39xx
Farm Product Storage	4221
Refrigerated Storage	4222
General Storage	4225
Recycling facilities involved in the recycling of materials, including but not limited to, metal scrap yards, battery reclaimers, salvage yards, auto recyclers, and automobile junkyards.	5015 and 5093
Steam Electric Power Generation	N/A
Active <i>landfills</i> , including, but not limited to, wood waste and inert <i>landfills</i> , transfer stations, open dumps, compost facilities, and <i>land application sites</i> , except as described in S1.C.6 or C.7.	4953
Hazardous waste treatment, storage, and disposal (TSD) facilities, and recycling facilities regulated under Chapter 173-303 WAC.	N/A
Treatment works treating domestic sewage, or any other sewage sludge, or wastewater treatment device or system, used in the storage, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are located within the confines of the <i>facility</i>) with the design flow capacity of 1 million gallons per day (MGD) or more, or required to have a pretreatment program under 40 CFR §403.	4952
Transportation facilities which have <i>vehicle maintenance</i> activity, equipment cleaning operations, or airport deicing operations:	
• Railroad Transportation	40xx
• Local and Suburban Transit and Interurban Highway Passenger Transportation	41xx
• Motor Freight Transportation (except SIC 4221–25)	42xx
• United States Postal Service	43xx
• Water Transportation	44xx
• Air Transportation	45xx
• Petroleum Bulk Stations and Terminals	5171

2. Any facility that has an existing *National Pollutant Discharge Elimination System (NPDES)* permit which does not address all *stormwater discharges associated with industrial activity* [40 CFR Subpart 122.26(b)(14)] shall obtain permit coverage.
3. Any *inactive facility* which is listed under 40 CFR Subpart 122.26(b)(14) where *significant materials* remain onsite and are exposed to *stormwater* shall obtain permit coverage.

B. Significant Contributors of Pollutants

Ecology may require a facility to obtain coverage under this permit if *Ecology* determines the facility:

1. Is a *significant contributor of pollutants* to *waters of the state*, including *ground water*;
2. May reasonably be expected to cause a violation of any *water quality standard*; or
3. Conducts *industrial activity*, or has a SIC code, with *stormwater* characteristics similar to any *industrial activity* or SIC code listed in Table 1 in S1.A1.

C. Facilities Not Required to Obtain Coverage

Ecology does not require the types of facilities listed below to obtain coverage under this permit, unless determined to be a *significant contributor of pollutants*.

1. Industrial facilities that submit an *application* and qualify for a Conditional “No Exposure” Exemption. (Condition S1.F)
2. Industrial facilities that *discharge stormwater* only to a *municipal combined sewer* or *sanitary sewer*. *Discharge* of stormwater to sanitary or *combined sewers* shall only occur as authorized by the municipal sewage authority.
3. Industrial facilities that *discharge stormwater* only to groundwater (e.g., on-site infiltration) with no *discharge* to *surface waters of the state* under any condition.
4. Office buildings and/or administrative parking lots from which *stormwater* does not commingle with stormwater from areas associated with *industrial activity*.
5. Any part of a *facility* with a *discharge* that is in compliance with the instructions of an On-Scene-Coordinator pursuant to 40 CFR part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances), in accordance with 40 CFR 122.3(d).
6. Any *land application site* used for the beneficial use of industrial or municipal wastewater for agricultural activities or when applied for landscaping purposes at agronomic rates.
7. Any farmland, domestic garden, or land used for sludge management where domestic sewage sludge (biosolids) is beneficially reused (nutrient builder or soil conditioner) and which is not physically located in the confines of domestic sewage treatment

works, or areas that are in compliance with Section 405 (Disposal of Sewage Sludge) of the *Clean Water Act (CWA)*.

8. Any inactive coal mining operation if:
 - a. The performance bond issued to the *facility* by the appropriate Surface Mining Control and Reclamation Act (SMCRA) authority has been released from applicable state or federal reclamation requirements after December 17, 1990.
 - b. The mine does not have a *discharge of stormwater* that comes in contact with any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of the *facility*.
9. Inactive mining, inactive oil and gas operations, or inactive *landfills* where neither an owner nor an operator can be identified.
10. Closed *landfills* that are capped and stabilized, in compliance with Chapter 173-304 WAC, and in which no *significant materials* or industrial *pollutants* remain exposed to *stormwater*. Permittee's with existing coverage may submit a *Notice of Termination* in accordance with Special Condition S13.A.1.

D. Facilities Excluded from Coverage

Ecology will not cover the following facilities or activities under this permit:

1. Any part of a *facility* that has a *stormwater discharge* subject to *stormwater* Effluent Limitations Guidelines, New Source Performance Standards (NSPS) Under 40 *CFR* Subchapter N, or Toxic Pollutant Effluent Standards under 40 *CFR* Subchapter D Part 129; these facilities must apply for NPDES permit coverage in an individual or industry-specific *general permit* for those *stormwater discharges*.

Below is a list of categories of industries specified in 40 *CFR* Subchapter N for which at least one subpart includes *stormwater* effluent limitations guidelines or NSPS. Industries included in this list should review the Subchapter N guidelines to determine if they are subject to a *stormwater* effluent limitation guideline for activities which they perform at their site.

40 CFR 411 Cement manufacturing	40 CFR 423 Steam electric power generating
40 CFR 412 Feedlots	40 CFR 434 Coal mining
40 CFR 418 Fertilizer manufacturing	40 CFR 436 Mineral mining and processing
40 CFR 419 Petroleum refining	40 CFR 440 Ore mining and dressing
40 CFR 422 Phosphate manufacturing	40 CFR 443 Paving and roofing materials (tars & asphalt)

Facilities discharging any of the following toxic *pollutants*, which are limited by effluent standards in 40 *CFR* Subchapter D Part 129: Aldrin/Dieldrin; DDT; Endrin; Toxaphene; Benzidine; or Polychlorinated Biphenyls (PCBs); these facilities shall obtain coverage under an individual NPDES permit.

2. Nonpoint source silvicultural activities with natural *runoff* that are excluded in 40 *CFR* Subpart 122.27.

3. Industrial activities operated by any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government of the United States, or another entity, such as a private contractor, performing industrial activity for any such department, agency, or instrumentality.
4. Facilities located on Tribal lands or facilities that *discharge stormwater* to receiving waters subject to *water quality standards* of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation.
5. Any *facility* authorized to *discharge stormwater* associated with *industrial activity* under an existing NPDES individual or other *general permit*.
6. All *construction activities*. Operators of these construction activities shall seek coverage under the Construction Stormwater General Permit or an individual NPDES permit for *stormwater* associated with *construction activity*.
7. Facilities that *discharge* to a water body with a *control plan*, unless this *general permit* adequately provides the level of protection required by the *control plan*.
8. *New dischargers* to a water body listed pursuant to Section 303(d) of the CWA, unless the Permittee meets the requirements of Condition S6.B.
9. Hazardous waste *landfills* subject to 40 CFR Part 445, Subpart A.

E. Discharges to Ground

1. For sites that *discharge* to both surface water and *ground water*, the terms and conditions of this permit shall apply to all *ground water discharges*.
2. Facilities that *discharge* to *ground water* through an *underground injection control well* shall comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

F. Conditional "No Exposure" Exemption

1. Any *industrial activity* identified for coverage under Condition S1.A. that is eligible for a "No Exposure" exemption from the permit under 40 CFR 122.26 (g), may submit a No Exposure Certification Form to *Ecology*, either in writing or electronically.
 - a. A Permittee is automatically granted a No Exposure exemption 90 days from *Ecology's* receipt of a complete and accurate No Exposure Certification Form, unless *Ecology* informs the applicant in writing or electronically within 90 days that it has denied or approved the request.
 - b. *Ecology* will automatically terminate permit coverage when it grants the No Exposure exemption to a permitted *facility*.
 - c. Facilities which are granted a No Exposure exemption must submit a No Exposure Certification Form to *Ecology* once every five years, or by October 1, 2013, whichever is earlier.

- d. No Exposure exemptions are conditional. If there is a change at the *facility* that results in the exposure of industrial activities or materials to *stormwater*, the *facility* is required to immediately apply for and obtain a permit.

S2. APPLICATION FOR COVERAGE

A. Obtaining Permit Coverage

1. Permitted Facilities

Permittees with coverage under the existing industrial *stormwater general permit* (effective date Nov 15, 2008) are automatically covered under this permit unless otherwise notified by *Ecology*.

2. Unpermitted Facilities

Unpermitted facilities that require coverage under this permit shall submit a complete and accurate permit *application* to *Ecology* as follows:

a. Existing Facilities

- i. Unpermitted existing facilities that require coverage under this permit shall submit a complete and accurate permit *application* to *Ecology*.
- ii. Existing facilities are facilities in operation prior to the effective date of this permit, January 1, 2010.

b. New Facilities

New facilities are facilities that begin operation on or after the effective date of this permit, January 1, 2010. All unpermitted new facilities shall:

- i. Submit a complete and accurate permit *application* to *Ecology* at least 60 days before the commencement of *stormwater discharge* from the *facility*.
- ii. The *application* shall include certification that the *facility* has met the applicable public notice and *State Environmental Policy Act (SEPA)* requirements in WAC 173-226-200(f).

B. Modification of Permit Coverage

A Permittee anticipating a *significant process change*, or otherwise requesting a modification of permit coverage, shall submit a complete Modification of Coverage Form to *Ecology*. The Permittee shall:

1. Apply for modification of coverage at least 60 days before implementing a *significant process change*; or by May 15th prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.
2. Complete the public notice requirements in WAC 173-226-130(5) as part of a complete *application* for modification of coverage.
3. Comply with SEPA as part of a complete *application* for modification of coverage if undergoing a *significant process change*.

C. Permit Coverage Timeline

1. If the applicant does not receive notification from *Ecology*, permit coverage automatically commences on whichever of the following dates occurs last:
 - a. The 31st day following receipt by *Ecology* of a completed *application* for coverage .
 - b. The 31st day following the end of a 30-day public comment period.
 - c. The effective date of the *general permit*.
2. *Ecology* may need additional time to review the *application*:
 - a. If the *application* is incomplete.
 - b. If it requires additional site-specific information.
 - c. If the public requests a public hearing.
 - d. If members of the public file comments.
 - e. When more information is necessary to determine whether coverage under the *general permit* is appropriate.
3. When *Ecology* needs additional time:
 - a. *Ecology* will notify the applicant in writing within 30 days and identify the issues that the applicant must resolve before a decision can be reached.
 - b. *Ecology* will submit the final decision to the applicant in writing. If *Ecology* approves the *application* for coverage, coverage begins the 31st day following approval, or the date the approval letter is issued, whichever is later.

D. Transfer of Permit Coverage

Coverage under this *general permit* shall automatically transfer to a *new discharger*, if all of the following conditions are met:

1. The Permittee (existing *discharger*) and *new discharger* submit to *Ecology* a complete, written, signed agreement (Transfer of Coverage Form) containing a specific date for transfer of permit responsibility, coverage, and liability.
2. The type of industrial activities and practices remain substantially unchanged.
3. *Ecology* does not notify the Permittee of the need to submit a new *application* for coverage under the *general permit* or for an individual permit pursuant to Chapters 173-216, 173-220, and 173-226 WAC.
4. *Ecology* does not notify the existing *discharger* and *new discharger* of its intent to revoke coverage under the *general permit*. The transfer is effective on the date specified in the written agreement unless *Ecology* gives this notice.

S3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General Requirements

1. All Permittees and applicants for coverage under this permit shall develop and implement a SWPPP for the permitted *facility* as follows:
2. The SWPPP shall specify the *Best Management Practices* (BMPs) necessary to:
 - a. Provide *all known, available, and reasonable methods of prevention, control, and treatment (AKART)* of *stormwater pollution*.
 - b. Ensure the *discharge* does not cause or contribute to a violation of the *Water Quality Standards*.
 - c. Comply with applicable federal technology-based treatment requirements under *40 CFR 125.3*.
3. Proper Selection and Use of *Stormwater Management Manuals (SWMM)*:
BMPs shall be consistent with:
 - a. *Stormwater Management Manual* for Western Washington (2005 edition), for sites west of the crest of the Cascade Mountains.
 - b. *Stormwater Management Manual* for Eastern Washington (2004 edition), for sites east of the crest of the Cascade Mountains.
 - c. Revisions to the manuals in S3.A.3. a & b., or other *stormwater* management guidance documents or manuals which provide an equivalent level of *pollution* prevention, that are approved by *Ecology* and incorporated into this permit in accordance with the permit modification requirements of WAC 173-220-190. For purposes of this section, the documents listed in Appendix 10 of the Phase I Municipal Stormwater Permit are hereby incorporated into this permit.
 - d. Documentation in the SWPPP that the BMPs selected are *demonstrably equivalent* to practices contained in stormwater technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.
4. Update of the SWPPP
 - a. The Permittee shall modify the SWPPP if the owner/operator or the applicable local or state regulatory authority determines during inspections or investigations that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing *pollutants* in *stormwater* discharges from the site. The Permittee shall modify the SWPPP:
 - i. As necessary to include additional or modified BMPs designed to correct problems identified.
 - ii. To correct the deficiencies identified in writing from *Ecology* within 30 days of notice.

- b. The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the *facility* that significantly changes the nature of *pollutants* discharged in *stormwater* from the *facility*, or significantly increases the quantity of pollutants discharged.

5. Other *Pollution Control Plans*

The Permittee may incorporate by reference applicable portions of plans prepared for other purposes at their *facility*. Plans or portions of plans incorporated by reference into a SWPPP become enforceable requirements of this permit and must be available along with the SWPPP as required in S9.F. A *Pollution Prevention Plan* prepared under the Hazardous Waste Reduction Act, Chapter 70.95C RCW, is an example of such a plan.

6. Signatory Requirements

The Permittee shall sign and certify all SWPPPs in accordance with General Condition G2, each time it revises or modifies a SWPPP to comply with Conditions S3.A.4 (Update of the SWPPP), S7 (Inspections) or S8 (Corrective Actions). A SWPPP Certification Form is contained in Appendix 3 of this permit.

B. Specific SWPPP Requirements

The SWPPP shall contain a site map, a detailed assessment of the *facility*, a detailed description of the BMPs, Spill Prevention and Emergency Cleanup Plan, and a sampling plan. The Permittee shall identify any parts of the SWPPP which the *facility* wants to claim as Confidential Business Information.

1. The site map shall identify:

- a. The scale or include relative distances between significant structures and drainage systems.
- b. Significant features.
- c. The *stormwater* drainage and *discharge* structures and identify, by name, any other party other than the Permittee that owns any *stormwater* drainage or discharge structures.
- d. The *stormwater* drainage areas for each *stormwater discharge* point off-site (including discharges to *ground water*) and assign a unique identifying number for each discharge point.
- e. Each sampling location by unique identifying number.
- f. Paved areas and buildings.
- g. Areas of *pollutant* contact (actual or potential) associated with specific industrial activities.
- h. Conditionally approved non-*stormwater* discharges (Condition S5.D).
- i. Surface water locations (including wetlands and drainage ditches).
- j. Areas of existing and potential soil *erosion* (in a *significant amount*).

- k. *Vehicle maintenance* areas.
- l. Lands and waters adjacent to the site that may be helpful in identifying *discharge* points or drainage routes.
- 2. The *facility* assessment shall include a description of the *facility*; an inventory of *facility* activities and equipment that contribute to or have the potential to contribute any *pollutants* to *stormwater*; and, an inventory of materials that contribute to or have the potential to contribute pollutants to *stormwater*.
 - a. The *facility* description shall describe:
 - i. The industrial activities conducted at the site.
 - ii. *Regular business hours* and seasonal variations in business hours or industrial activities.
 - iii. The general layout of the *facility* including buildings and storage of raw materials, and the flow of goods and materials through the *facility*.
 - b. The inventory of industrial activities shall identify all areas associated with industrial activities (see Table 1) that have been or may potentially be sources of *pollutants*, including, but not limited to, the following:
 - i. Loading and unloading of dry bulk materials or liquids.
 - ii. Outdoor storage of materials or products.
 - iii. Outdoor manufacturing and processing.
 - iv. On-site dust or particulate generating processes.
 - v. On-site waste treatment, storage, or disposal.
 - vi. *Vehicle* and equipment fueling, maintenance, and/or cleaning (includes washing).
 - vii. Roofs or other surfaces exposed to *air emissions* from a manufacturing building or a process area.
 - viii. Roofs or other surfaces composed of materials that may be mobilized by *stormwater* (e.g., galvanized roofs, galvanized fences, etc.).
 - c. The inventory of materials shall list:
 - i. The types of materials handled at the site that potentially may be exposed to precipitation or *runoff* and could result in *stormwater pollution*.
 - ii. A short narrative for each material describing the potential of the *pollutant* to be present in *stormwater* discharges. The Permittee shall update this narrative when data become available to verify the presence or absence of these pollutants.
 - iii. A narrative description of any potential sources of *pollutants* from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to *stormwater*. Include the

method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.

3. The SWPPP shall identify specific individuals by name or by title within the organization (*pollution prevention team*) whose responsibilities include: SWPPP development, implementation, maintenance, and modification.

4. *Best Management Practices (BMPs)*

- a. General BMP Requirements

The Permittee shall describe each BMP selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*.

- b. No later than July 1, 2010, the Permittee shall include each of the following mandatory BMPs in the SWPPP and implement the BMPs. The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP. Prior to July 1, 2010, the Permittee shall implement the BMP requirements of the previous Industrial *Stormwater General Permit*, or Condition S3.B.4 of this permit.

- i. Operational Source Control BMPs

- 1) The SWPPP shall include the *Operational Source Control BMPs* listed as “applicable” in *Ecology’s* SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.
 - 2) Good Housekeeping: The SWPPP shall include BMPs that define ongoing maintenance and cleanup, as appropriate, of areas which may contribute *pollutants* to *stormwater* discharges. The SWPPP shall include the schedule/frequency for completing each housekeeping task, based upon *industrial activity*, sampling results and observations made during inspections. The Permittee shall:
 - a) Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated *pollutants* a minimum of once per quarter.
 - b) Identify and control all on-site sources of dust to minimize *stormwater* contamination from the deposition of dust on areas exposed to precipitation.
 - c) Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.
 - d) Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.

- 3) **Preventive Maintenance:** The SWPPP shall include BMPs to inspect and maintain the *stormwater* drainage, source controls, treatment systems (if any), and plant equipment and systems that could fail and result in contamination of *stormwater*. The SWPPP shall include the schedule/frequency for completing each maintenance task. The Permittee must:
- a) Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.
 - b) Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and *vehicles* out of service or prevent leaks from spilling on the ground until repaired.
 - c) Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the *discharge* of *pollutants*.
- 4) **Spill Prevention and Emergency Cleanup Plan (SPECP):** The SWPPP shall include a SPECP that includes BMPs to prevent spills that can contaminate *stormwater*. The SPECP shall specify BMPs for *material handling* procedures, storage requirements, cleanup equipment and procedures, and spill logs, as appropriate. The Permittee shall:
- a) Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.
 - b) Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.
 - c) Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include:
 - i) Oil absorbents capable of absorbing 15 gallons of fuel.
 - ii) A storm drain plug or cover kit.
 - iii) A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.
 - iv) A non-metallic shovel.
 - v) Two five-gallon buckets with lids.

- d) Not lock shut-off fueling nozzles in the open position. Do not “top-off” tanks being refueled.
 - e) Block, plug or cover storm drains that receive *runoff* from areas where fueling, during fueling.
 - f) Use drip pans or equivalent containment measures during all petroleum transfer operations.
 - g) Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone *vehicles* and equipment awaiting maintenance to protected areas).
 - h) Use drip pans and absorbents under or around leaky *vehicles* and equipment or store indoors where feasible. Drain fluids from equipment and *vehicles* prior to on-site storage or disposal.
 - i) Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.
- 5) Employee Training: The SWPPP shall include BMPs to provide SWPPP training for employees who have duties in areas of industrial activities subject to this permit. At a minimum, the training plan shall include:
- a) The content of the training,
 - i) An overview of what is in the SWPPP.
 - ii) How employees make a difference in complying with the SWPPP and preventing contamination of *stormwater*.
 - iii) Spill response procedures, good housekeeping, maintenance requirements, and material management practices.
 - b) How the Permittee will conduct training.
 - c) The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.
 - d) A log of the dates on which specific employees received training.
- 6) Inspections and Recordkeeping: The SWPPP shall include documentation of procedures to ensure compliance with permit requirements for inspections and recordkeeping. At a minimum, the SWPPP shall:
- a) Identify *facility* personnel who will inspect designated equipment and *facility* areas as required in Condition S7.
 - b) Contain a visual inspection report or check list that includes all items required by Condition S7.C.

- c) Provide a tracking or follow-up procedure to ensure that a report is prepared and any appropriate action taken in response to visual inspections.
 - d) Define how the Permittee will comply with signature requirements and records retention identified in Special Condition S9, Reporting and Recordkeeping Requirements.
 - e) Include a certification of compliance with the SWPPP and permit for each inspection using the language in S7.C.1.c.
- 7) *Illicit Discharges*: The SWPPP shall include measures to identify and eliminate the *discharge of process wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater sewers, or to surface waters and ground waters of the state*. The Permittee can find BMPs to identify and eliminate *illicit discharges* in Volume IV of Ecology's SWMM for Western Washington and Chapter 8 of the SWMM for Eastern Washington.

Water from washing *vehicles* or equipment, steam cleaning and/or pressure washing is considered *process wastewater*. The Permittee must not allow this process wastewater to comeingle with *stormwater* or enter storm drains; and must collect in a tank for off-site disposal, or *discharge* it to a *sanitary sewer*, with written approval from the local sewage authority.

ii. *Structural Source Control BMPs*

- 1) The SWPPP shall include the *Structural Source Control BMPs* listed as "applicable" in Ecology's SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.
- 2) The SWPPP shall include BMPs to minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and *runoff* by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.

Permittees shall:

- a) Use grading, berming, or curbing to prevent *runoff* of contaminated flows and divert run-on away from these areas.
- b) Perform all cleaning operations indoors, under cover, or in bermed areas that prevent *stormwater runoff* and run-on and also that capture any overspray.
- c) Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the *stormwater drainage system*.

iii. *Treatment BMPs*

The Permittee shall:

- 1) Use *Treatment BMPs* consistent with the applicable documents referenced in Condition S3.A.3.
- 2) Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of *stormwater* discharges.
- 3) Obtain *Ecology* approval before beginning construction/installation of all *treatment BMPs* that include the addition of chemicals to provide treatment.

iv. *Stormwater Peak Runoff Rate and Volume Control BMPs*

Facilities with *new development* or *redevelopment* shall evaluate whether flow control BMPs are necessary to satisfy the state's AKART requirements, and prevent violations of water quality standards. If flow control BMPs are required, they shall be selected according to S3.A.3.

v. *Erosion and Sediment Control BMPs*

The SWPPP shall describe the BMPs necessary to prevent the *erosion* of soils and other earthen materials (crushed rock/gravel, etc.) and prevent off-site *sedimentation* and violations of *water quality standards*. The Permittee shall implement and maintain:

- 1) *Sediment* control BMPs such as *detention* or retention ponds or traps, vegetated filter strips, bioswales, or other permanent *sediment* control BMPs to minimize *sediment* loads in *stormwater* discharges.
- 2) Filtration BMPs to remove solids from catch basins, sumps or other *stormwater* collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

5. Sampling Plan

The SWPPP shall include a sampling plan. The plan shall:

- a. Identify points of *discharge* to surface water, *storm sewers*, or discrete *ground water* infiltration locations, such as dry wells or *detention* ponds.
- b. Include documentation of why each *discharge* point is not sampled per S4.B.2.c (if applicable):
 - i. Location of which *discharge* points the Permittee does not sample because the *pollutant* concentrations are substantially identical to a discharge point being sampled.
 - ii. General industrial activities conducted in the drainage area of each *discharge* point.
 - iii. *Best Management Practices* conducted in the drainage area of each outfall.

- iv. Exposed materials located in the drainage area of each *discharge* point that are likely to be significant contributors of *pollutants* to *stormwater discharges*.
- v. Impervious surfaces in the drainage area that could affect the percolation of *stormwater runoff* into the ground (e.g., asphalt, crushed rock, grass, etc.).
- vi. Reasons why the Permittee expects the *discharge* points to discharge substantially identical effluents.
- c. Identify each sampling location by its unique identifying number such as A1, A2, etc.
- d. Identify staff responsible for conducting *stormwater* sampling.
- e. Specify procedures for sample collection and handling.
- f. Specify procedures for sending samples to a laboratory.
- g. Identify parameters for analysis, holding times and preservatives, laboratory *quantitation levels*, and analytical methods.
- h. Specify the procedure for submitting results to *Ecology*.

S4. GENERAL SAMPLING REQUIREMENTS

A. General Requirements

The Permittee shall conduct sampling of *stormwater* in accordance with this permit and the SWPPP.

B. Sampling Requirements

1. Sample Timing and Frequency

- a. The Permittee shall sample the *discharge* from each designated location at least once per quarter:

1st Quarter = January, February, and March

2nd Quarter = April, May, and June

3rd Quarter = July, August, and September

4th Quarter = October, November, and December

- b. Permittees shall sample the *stormwater discharge* from the first fall storm event each year. "First fall storm event" means the first time after October 1st of each year that precipitation occurs and results in a *stormwater discharge* from a *facility*.
- c. Permittees shall collect samples within the first 12 hours of *stormwater discharge* events. If it is not possible to collect a sample within the first 12 hours of a *stormwater discharge* event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records (Condition S4.B.3) explaining why they could not collect samples within the first 12

hours; or if it is unknown (e.g., discharge was occurring during start of regular business hours).

- d. The Permittee shall obtain *representative samples*, which may be a single grab sample, a time-proportional sample, or a flow-proportional sample.
- e. Permittees need not sample outside of *regular business hours*, during unsafe conditions, or during quarters where there is no discharge, but shall submit a Discharge Monitoring Report each reporting period (Condition S9.A).

2. Sample Location(s)

- a. The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.
- b. The Permittee is not required to sample on-site discharges to ground (e.g., infiltration, etc.) or *sanitary sewer* discharges, unless specifically required by *Ecology* (Condition G12).
- c. The Permittee shall sample each distinct point of *discharge* off-site except as otherwise exempt from monitoring as a “substantially identical outfall” per S3.B.5.b. The Permittee is required to monitor only one of the “substantially identical outfalls” if two or more outfalls discharge substantially identical effluents (based on similar industrial activities and site conditions).
- d. The exception to sampling each point of *discharge* in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).

3. Sample Documentation

For each *stormwater* sample taken, the Permittee shall record the following information and retain it on-site for *Ecology* review:

- a. Sample date.
- b. Sample time.
- c. A notation describing if the Permittee collected the sample within the first 12 hours of *stormwater* discharge events; or, if it is unknown (e.g., discharge was occurring during start of regular business hours).
- d. An explanation of why it could not collect a sample within the first 12 hours of a *stormwater discharge* event, if it was not possible. Or, if it is unknown, an explanation of why it doesn’t know if a sample was collected within or outside the first 12 hours of stormwater discharge.
- e. Sample location (using SWPPP identifying number).
- f. Method of sampling, and method of sample preservation, if applicable.
- g. Individual who performed the sampling.

4. Laboratory Documentation

The Permittee shall retain laboratory reports on-site for *Ecology* review and shall ensure that all laboratory reports providing data for all parameters include the following information:

- a. Date of analysis.
 - b. Parameter name.
 - c. CAS number, if applicable.
 - d. Analytical method(s).
 - e. Individual who performed the analysis.
 - f. Method detection limit (MDL).
 - g. Laboratory *quantitation level* (QL) achieved by the laboratory.
 - h. Reporting units.
 - i. Sample result.
 - j. Quality assurance/quality control data.
5. The Permittee shall maintain the original records onsite and make them available to *Ecology* upon request.
6. The Permittee may suspend sampling for one or more parameters (other than “visible oil sheen”) based on consistent attainment of *benchmark* values when:
- a. Eight consecutive quarterly samples, collected after the effective date of this permit, demonstrate a reported value equal to or less than the *benchmark* value; or for pH, within the range of 5.0 – 9.0.
 - b. For purposes of tallying “consecutive quarterly samples”:
 - i. Do not include any quarters in which the Permittee did not collect a sample, but should have (e.g., discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter). If this occurs, the tally of consecutive quarterly samples is reset to zero.
 - ii. Do not include any quarters in which the Permittee did not collect a sample because there was no *discharge* during the quarter (or the discharges during the quarter occurred outside normal working hours or during unsafe conditions). These quarters are not included in the calculation of eight consecutive quarters, but do not cause the tally to be reset; i.e., they are skipped over.
 - iii. Permittees who suspended sampling based on consistent attainment of benchmarks prior to July 1, 2012 must resume/continue sampling until a total of eight consecutive quarterly samples demonstrate consistent attainment.
 - c. Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and “visible oil sheen”) and compare the average value to the *benchmark* value.

7. A Permittee who has a *significant process change* shall not use previous sampling results to demonstrate consistent attainment.
8. Suspension of sampling based on consistent attainment *does not* apply to *pollutant* parameters subject to numeric effluent limits based on federal Effluent Limitation Guidelines (Condition S5.C) or Section 303(d) of the *Clean Water Act* (Condition S6).

C. Analytical Procedures for Sampling Requirements

The Permittee shall ensure that analytical methods used to meet the sampling requirements specified in this permit conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

D. Laboratory Accreditation

1. The Permittee shall ensure that all analytical data required by *Ecology* is prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC.
2. *Turbidity* and pH are exempt from this requirement, unless the laboratory must be registered or accredited for any other parameter.

S5. BENCHMARKS, EFFLUENT LIMITATIONS AND SPECIFIC SAMPLING REQUIREMENTS

A. Benchmarks and Sampling Requirements

1. Permittees shall sample their *stormwater discharges* as specified in Condition S4 and as specified in Table 2.
2. Additional sampling and/or requirements apply to specific industrial categories (S5.B), and facilities subject to effluent limitation guidelines (S5.C), and certain discharges to impaired waterbodies (S6).
3. If a Permittee's discharge exceeds a *benchmark* listed in Table 2, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter (except pH and "visible oil sheen") and compare the average value to the *benchmark* to determine if the discharge has exceeded a *benchmark* value.

Table 2: Benchmarks and Sampling Requirements Applicable to All Facilities

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level ^a	Minimum Sampling Frequency ^b
Turbidity	NTU	25	EPA 180.1 Meter	0.5	1/quarter
pH	Standard Units	Between 5.0 and 9.0	Meter/Paper ^c	±0.5	1/quarter
Oil Sheen	Yes/No	No Visible Oil Sheen	N/A	N/A	1/quarter
Copper, Total	µg/L	Western WA: 14 Eastern WA: 32	EPA 200.8	2.0	1/quarter
Zinc, Total	µg/L	117	EPA 200.8	2.5	1/quarter

^a The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from 40 CFR Part 136 is sufficient to produce measurable results in its effluent, it may use that method for analysis.

^b 1/quarter means 1 sample taken each quarter, year-round.

^c Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 SU.

B. Additional Sampling Requirements for Specific Industrial Groups

1. In addition to the requirements in Table 2, all Permittees identified by an *industrial activity* in Table 3 shall sample *stormwater* discharges as specified in Condition S4 and in Table 3.
2. If a *discharge* exceeds a *benchmark* listed in Table 3, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter and compare the average value to the *benchmark* to determine if the discharge has exceeded a *benchmark*.

Table 3: Additional Benchmarks and Sampling Requirements Applicable to Specific Industries

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level ^a	Minimum Sampling Frequency ^b
1. Chemical and Allied Products (28xx), Food and Kindred Products (20xx)					
BOD ₅	mg/L	30	EPA 405.1 or SM 5210B	2	1/quarter
Nitrate/Nitrite, as Nitrogen	mg/L	0.68	EPA 353.1	0.10	1/quarter
Phosphorus, Total	mg/L	2.0	EPA 365.1	0.10	1/quarter
2. Primary Metals(33xx), Metals Mining (10xx), Automobile Salvage and Scrap Recycling (5015 and 5093), Metals Fabricating (34xx)					
Lead, Total	µg/L	81.6	EPA 200.8	0.5	1/quarter
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1	1/quarter
3. Hazardous Waste Treatment, Storage and Disposal Facilities and Dangerous Waste Recyclers subject to the provisions of Resource Conservation and Recovery Act (RCRA) Subtitle C					
Chemical Oxygen Demand (COD)	mg/L	120	SM5220-D	10	1/quarter
Ammonia, Total, as N	mg/L	2.1	SM4500-NH3- GH	0.3	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter
Arsenic, Total	µg/L	150	EPA 200.8	0.5	1/quarter
Cadmium, Total	µg/L	2.1	EPA 200.8	0.25	1/quarter
Cyanide, Total	µg/L	22	SM 4500-CN I	10	1/quarter
Lead, Total	µg/L	81.6	EPA 200.8	0.5	1/quarter
Magnesium, Total	µg/L	64	EPA 200.7	80	1/quarter
Mercury, Total	µg/L	1.4	EPA 1631E	0.0005	1/quarter
Selenium, Total	µg/L	5.0	EPA 200.8	1.0	1/quarter
Silver, Total	µg/L	3.8	EPA 200.8	0.2	1/quarter
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1	1/quarter
4. Air Transportation^c (45xx)					
Ammonia	mg/L	2.1	SM4500-NH3- GH	0.3	1/quarter
BOD ₅	mg/L	30	EPA 405.1 or SM 5210B	2	1/quarter
COD	mg/L	120	EPA 410.2	5	1/quarter
Nitrate/Nitrite, as N	mg/L	0.68	EPA 4500-NO3-E/F/H	0.10	1/quarter

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level ^a	Minimum Sampling Frequency ^b
5. Timber Product Industry (24xx), Paper and Allied Products (26xx)					
COD	mg/L	120	SM5220-D	10	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter

- ^a The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.
- ^b 1/quarter means 1 sample taken each quarter, year-round.
- ^c For airports where a single permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these additional four parameters in those outfalls that collect *runoff* from areas where deicing activities occur (SIC 4512-4581).

C. Stormwater Discharges Subject to Effluent Limitation Guidelines

1. Permittees with discharges from the following activities shall comply with the effluent limits and monitor as specified in Condition S4 and Tables 4 and 5.
2. The *discharge of the pollutants* at a level more than that identified and authorized by this permit for these activities shall constitute a violation of the terms and conditions of this permit.
3. Permittees operating non-hazardous waste *landfills* subject to the provisions of 40 CFR Part 445 Subpart B shall not exceed the effluent limits³ listed in Table 4.

³ As set forth in 40 CFR Part 445 Subpart B, these numeric effluent limits apply to contaminated *stormwater* discharges from Municipal Solid Waste Landfills that have not been closed in accordance with 40 CFR 258.60, and to contaminated *stormwater* discharges from those landfills that are subject to the provisions of 40 CFR Part 257 except for discharges from any of the following facilities:

- (a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
- (b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) landfills operated in conjunction with CWT facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
- (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Table 4: Effluent Limits Applicable to Non-Hazardous Waste Landfills Subject to 40 CFR Part 445 Subpart B

Parameter	Units	Average Monthly ^a	Maximum Daily ^b	Analytical Method ^c	Laboratory Quantitation Level ^d	Minimum Sampling Frequency ^e
BOD ₅	mg/L	37	140	EPA 405.1 or SM 5210B	2	1/quarter
TSS	mg/L	27	88	SM2540-D	5	1/quarter
Ammonia (total as N)	mg/L	4.9	10	SM4500-NH3-GH.	0.3	1/quarter
Alpha Terpineol	µg/L	16	33	EPA 625	5	1/quarter
Benzoic Acid	µg/L	71	120	EPA 625	50	1/quarter
p-Cresol (4-methylphenol)	µg/L	14	25	EPA 8270D	10 ug/L	1/quarter
Phenol	µg/L	15	26	EPA 625	4.0	1/quarter
Zinc, Total	µg/L	110	200	EPA 200.8	2.5	1/quarter
pH	SU	Between 6.0 and 9.0		Meter/Paper ^e	±0.1	1/quarter

- ^a. Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the *discharge* value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured. If only one sample is taken during the calendar month, the average monthly effluent limitation applies to that sample. If only one sample is taken during the reporting period, the average monthly effluent limitation applies to that sample.
- ^b. Maximum daily effluent limit means the highest allowable daily discharge. The daily *discharge* means the *discharge of a pollutant* measured during a calendar day. The daily discharge is the average measurement of the *pollutant* over the day; this does not apply to pH.
- ^c. Or other equivalent EPA-approved method with the same or lower *quantitation level*.
- ^d. The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive (higher detection level and *quantitation level*) from 40 CFR Part 136 method will provide measurable results in its effluent, it may use that method for analysis.
- ^e. 1/quarter means 1 sample taken each quarter, year-round.

D. Conditionally Authorized Non-Stormwater Discharges

1. The categories and sources of non-stormwater discharges identified in Condition S5. D.2, below, are conditionally authorized, provided:
 - a. The *discharge* is otherwise consistent with the terms and conditions of this permit, including Condition S5, S6 and S10.

- b. The Permittee conducts the following assessment for each non-*stormwater discharge* (except for S5.D.2.a & f) and documents the assessment in the SWPPP, consistent with Condition S3.B.2. The Permittee shall:
 - i. Identify each source.
 - ii. Identify the location of the discharge into the *stormwater* collection system.
 - iii. Characterize the discharge including estimated flows or flow volume, and likely *pollutants* which may be present.
 - iv. Evaluate and implement available and reasonable *source control BMPs* to reduce or eliminate the discharge.
 - v. Evaluate compliance of the *discharge* with the state *water quality standards*.
 - vi. Identify appropriate BMPs for each discharge to control *pollutants* and or flow volumes.

2. Conditionally authorized non-*stormwater* discharges include:

- a. Discharges from fire fighting activities.
- b. Fire protection system flushing, testing, and maintenance.
- c. Discharges of potable water including water line flushing, provided that water line flushing must be de-chlorinated prior to discharge.
- d. Uncontaminated air conditioning or compressor condensate.
- e. Landscape watering and irrigation drainage.
- f. Uncontaminated *ground water* or spring water.
- g. Discharges associated with dewatering of foundations, footing drains, or utility vaults where flows are not contaminated with process materials such as solvents.
- h. Incidental windblown mist from cooling towers that collects on rooftops or areas adjacent to the cooling tower. This does not include intentional discharges from cooling towers such as piped cooling tower blow down or drains.

E. Prohibited Discharges

Unless authorized by a separate NPDES or state waste *discharge* permit, the following discharges are prohibited:

1. The discharge of *process wastewater* is not authorized. *Stormwater* that commingles with *process wastewater* is considered *process wastewater*.
2. *Illicit discharges* are not authorized by this permit. Conditionally authorized non-*stormwater* discharges in compliance with Condition S5.D are not *illicit discharges*.

F. General Prohibitions

Permittees shall manage *stormwater* to prevent the *discharge* of:

1. Synthetic, natural or processed oil or oil-containing products as identified by an oil sheen, and
2. Trash and floating debris.

S6. DISCHARGES TO 303(D)-LISTED OR TMDL WATERS

A. General Requirements for Discharges to 303(d)-listed Waters

Permittees with coverage under this permit that *discharge* to a *303(d)-listed water body* shall conduct sampling and inspections in accordance with Conditions S4, S6, and S7.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters

Facilities that meet the definition of “*new discharger*” and *discharge* to a *303(d) listed waterbody* are not eligible for coverage under this permit unless the *facility*:

1. Prevents all exposure to *stormwater* of the *pollutant(s)* for which the waterbody is impaired, and retains documentation of procedures taken to prevent exposure onsite with its SWPPP; or
2. Documents that the *pollutant(s)* for which the waterbody is impaired is not present at the *facility*, and retains documentation of this finding with the SWPPP; or
3. Provides *Ecology* with data to support a showing that the *discharge* is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data onsite with its SWPPP. The *facility* must provide data and other technical information to *Ecology* sufficient to demonstrate:
 - a. For discharges to waters without an *EPA* approved or established *TMDL*, that the *discharge* of the *pollutant* for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or
 - b. For discharges to waters with an *EPA* approved or established *TMDL*, that there are sufficient remaining *wasteload allocations* in an *EPA* approved or established *TMDL* to allow industrial *stormwater discharge* and that existing *dischargers* to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with *water quality standards*.

Facilities are eligible for coverage under this permit if *Ecology* issues permit coverage based upon an affirmative determination that the *discharge* will not cause or contribute to the existing impairment.

C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain 303(d)-listed Waters

1. Beginning July 1, 2010, Permittees discharging to a *303(d)-listed water body* that does not have an *EPA*-approved *total maximum daily load (TMDL)* shall comply with the applicable sampling requirements and effluent limits in Table 5, unless a compliance schedule is requested and granted in accordance with S6.C.1.b&c.

- a. Facilities subject to these limits include, but may not be limited to, facilities listed in Appendix 4.
- b. For purposes of this condition, “applicable sampling requirements and effluent limits” means the sampling and effluent limits in Table 5 that correspond to the specific parameter(s) the receiving water is *303(d)-listed* for at the time of permit coverage, or Total Suspended Solids (TSS) if the waterbody is *303(d)-listed* for any *sediment* quality parameter at the time of permit coverage.
- c. Permittees may request a compliance schedule for relief from the July 1, 2010 deadline to comply with an applicable effluent limit in Condition S6.C. Permittees shall submit requests for compliance schedules in writing to *Ecology* no later than January 31, 2010 and shall include the company name, *facility* location, industrial *stormwater* permit number, and the reason for requesting a compliance schedule.
- d. *Ecology* will consider all compliance schedule requests submitted by January 31, 2010. If *Ecology* determines that a Permittee is unable to comply with the applicable effluent limits by July 1, 2010, *Ecology* will establish a compliance schedule to require compliance as soon as possible, and no later than twenty-four months, or two complete wet seasons, after the effective date of this permit. *Ecology* will send its decision regarding the request for compliance schedule to the Permittee no sooner than April 1, 2010.
- e. For purposes of this condition, “wet season” means Oct 1st through June 30th.

Table 5: Sampling and Effluent Limits Applicable to Discharges to 303(d)-listed Waters

Parameter	Units	Effluent Limit		Analytical Method ^a	Laboratory Quantitation Level ^b	Sampling Frequency
		Fresh Water	Marine			
Turbidity	NTUs	25	25	EPA 180.1 Meter	0.5	1/quarter ^c
pH	SU	ⁱ	Between 7.0 and 8.5	Meter ^d	±0.5	1/quarter ^c
Fecal Coliform Bacteria	# colonies/ 100 mL	^h	^h	SM 9222D	20 CFU/ 100 mL	1/quarter ^c
TSS ^e	mg/L	30	30	SM2540-D	5	1/quarter ^c
Phosphorus, Total	mg/L	^f	^f	EPA 365.1	0.01	1/quarter ^c
Ammonia, total as N	mg/L	^f	^f	SM 4500 NH ₃ -GH	0.3	1/quarter ^c
Copper, Total	µg/L	^f	^f	EPA 200.8	2.0	1/quarter ^c
Lead, Total	µg/L	^f	^f	EPA 200.8	0.5	1/quarter ^c
Mercury, Total	µg/L	2.1	1.8	EPA1631E	0.0005	1/quarter ^c
Zinc, Total	µg/L	^f	^f	EPA 200.8	2.5	1/quarter ^c
Pentachlorophenol	µg/L	9 ^g	^f	EPA 625	1.0	1/quarter ^c

^a Or other equivalent method with the same reporting level.

^b The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table.

^c 1/quarter means 1 sample taken each quarter, e.g., Q1 = Jan 1 – March 31st, Q2 = April 1 – June 30th, etc.

^d Permittees shall use either a calibrated pH meter consistent with EPA 9040 or an approved state method.

^e A Permittee who discharges to a water body 303(d)-listed for any *sediment* quality parameter shall sample the *discharge* for TSS.

^f Site-specific effluent limitation will be assigned at the time of permit coverage.

^g Based on a pH of 7.0.

^h A numeric effluent limit does not apply, but permittees must sample according to Table 5. In addition, the following mandatory BMPs shall be incorporated into the SWPPP and implemented:

1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.

2) perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections;

3) Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, animal products, etc.):

4) Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste, etc.);

5) Additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.

ⁱ The effluent limit for a Permittee who discharges to a fresh water body 303(d)-listed for pH is: Between 6.0 and 8.5, if the 303(d)-listing is for high pH only; Between 6.5 and 9.0, if the 303(d)-listing is for low pH only; and Between 6.5 and 8.5 if the 303(d)-listing is for both low and high pH. All pH effluent limits are applied end-of-pipe.

D. Requirements for Discharges to Waters with Applicable TMDLs

1. The Permittee shall comply with *applicable TMDL* determinations. *Applicable TMDLs* or *TMDL* determinations are *TMDLs* which have been completed by the issuance date of this permit, or which have been completed prior to the date that the Permittee's *application* is received by *Ecology*, whichever is later. *Ecology* will list the Permittee's requirements to comply with this condition on the letter of permit coverage.
2. *TMDL* requirements associated with *TMDLs* completed after the issuance date of this permit only become effective if they are imposed through an administrative order issued by *Ecology*.
3. Where *Ecology* has established a *TMDL wasteload allocation* and sampling requirements for the Permittee's discharge, the Permittee shall comply with all requirements of the *TMDL* as listed in Appendix 5.
4. Where *Ecology* has established a *TMDL general wasteload allocation* for industrial *stormwater* discharges for a parameter present in the Permittee's discharge, but has not identified specific requirements, *Ecology* will assume the Permittee's compliance with the terms and conditions of the permit complies with the approved *TMDL*.
5. Where *Ecology* has not established a *TMDL wasteload allocation* for industrial *stormwater* discharges for a parameter present in the Permittee's discharge, but has not excluded these discharges, *Ecology* will assume the Permittee's compliance with the terms and conditions of this permit complies with the approved *TMDL*.
6. Where a *TMDL* for a parameter present in the Permittee's *discharge* specifically precludes or prohibits discharges of *stormwater* associated with *industrial activity*, the Permittee is not eligible for coverage under this permit.

S7. INSPECTIONS

A. Inspection Frequency and Personnel

1. The Permittee shall conduct and document visual inspections of the site each month.
2. The Permittee shall ensure that inspections are conducted by *qualified personnel*.

B. Inspection Components

Each inspection shall include:

1. Observations made at *stormwater* sampling locations and areas where *stormwater* associated with *industrial activity* is discharged off-site; or discharged to *waters of the state*, or to a *storm sewer* system that drains to *waters of the state*.
2. Observations for the presence of floating materials, visible oil sheen, discoloration, *turbidity*, odor, etc. in the *stormwater* discharge(s).
3. Observations for the presence of *illicit discharges* such as *domestic wastewater*, *noncontact cooling water*, or *process wastewater* (including *leachate*).

- a. If an *illicit discharge* is discovered, the Permittee shall notify *Ecology* within seven days.
- b. The Permittee shall eliminate the *illicit discharge* within 30 days.
- 4. A verification that the descriptions of potential *pollutant* sources required under this permit are accurate.
- 5. A verification that the site map in the SWPPP reflects current conditions.
- 6. An assessment of all BMPs that have been implemented, noting all of the following:
 - a. Effectiveness of BMPs inspected.
 - b. Locations of BMPs that need maintenance.
 - c. Reason maintenance is needed and a schedule for maintenance.
 - d. Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.

C. Inspection Results

- 1. The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site for *Ecology* review. The Permittee shall ensure each inspection report documents the observations, verifications and assessments required in S7.B and includes:
 - a. Time and date of the inspection.
 - b. Locations inspected.
 - c. Statements that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Condition G2., the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this permit.
 - d. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
 - e. Name, title, and signature of the person conducting site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."
 - f. Certification and signature of the person described in Condition G2.A, or a duly authorized representative of the *facility*, in accordance with Condition G.2.B.

D. Reports of Non-Compliance

The Permittee shall prepare reports of non-compliance identified during an inspection in accordance with the requirements of Condition S9.E.

S8. CORRECTIVE ACTIONS

A. Implementation of Source Control and Treatment BMPs from Previous Permit

In addition to the Corrective Action Requirements of S8.B-D, Permittees shall implement any applicable Level 1, 2 or 3 Responses required by the previous Industrial Stormwater *General Permit(s)*. Permittees shall continue to operate and/or maintain any source control or *treatment BMPs* related to Level 1, 2 or 3 Responses implemented prior to the effective date of this permit.

B. Level One Corrective Actions – Operational Source Control BMPs

Permittees that exceed any applicable *benchmark* value(s) in Table 2 or Table 3, shall complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following:

1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance:
 - a. Conduct an inspection to investigate the cause.
 - b. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable *Stormwater Management Manual*.
 - c. Make appropriate revisions to the SWPPP to include additional *Operational Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.
2. Summarize the Level 1 Corrective Actions in the Annual Report (Condition S9.B)
3. **Level One Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than the DMR due date for the quarter the *benchmark* was exceeded.

C. Level Two Corrective Actions – Structural Source Control BMPs

Permittees that exceed an applicable *benchmark* value (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Structural Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.
3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).

4. **Level 2 Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year⁴.
- If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.
 - If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.
 - To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
 - For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

D. Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable *benchmark* value (for a single parameter) for any three quarters during a calendar year shall complete a Level 3 Corrective Action in accordance with S8.D. A Level 2 Corrective Action is not required.

- Review the SWPPP and ensure that it fully complies with Permit Condition S3.
- Make appropriate revisions to the SWPPP to include additional *Treatment BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of *Treatment BMPs*.
 - The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.
 - A licensed professional engineer, geologist, hydrogeologist, or Certified Professional in Storm Water Quality (CPSWQ) shall design and stamp the portion of the SWPPP that addresses *stormwater* treatment structures or processes.
 - Ecology* may waive the requirement for a licensed or certified professional upon request of the Permittee and demonstration that the Permittee or treatment device vendor can properly design and install the treatment device; or the treatment BMP doesn't require site-specific design or sizing (e.g., off-the-shelf filtration units, etc.).
 - Ecology* will not waive the Level 3 requirement for a licensed or certified professional more than one time during the permit cycle.

⁴ For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater, the Permittee shall submit an engineering report, plans and specifications, and an operations and maintenance (O&M) manual to Ecology for review in accordance with Chapter 173-240 WAC.
 - a. The engineering report shall be submitted no later than the May 15th prior to the Level 3 deadline, unless an alternate due date is specified in an order.
 - b. The plans and specifications and O&M Manual shall be submitted at least 30 days before construction/installation, unless an alternate date is specified in an order. Upon request of the Permittee, Ecology may allow final conceptual drawings to be substituted for plans and specifications.
4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.
5. **Level 3 Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than September 30th the following year.
 - a. If installation of necessary *Treatment BMPs* is not feasible by the Level 3 Deadline; *Ecology* may approve additional time by approving a *Modification of Permit Coverage*.
 - b. If installation of *Treatment BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, *Ecology* may waive the requirement for *Treatment BMPs* by approving a *Modification of Permit Coverage*.
 - c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to *Ecology* in accordance with Condition S2.B, by May 15th prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
 - d. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

S9. REPORTING AND RECORDKEEPING

A. Discharge Monitoring Reports

1. The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by *Ecology*.

2. The Permittee shall submit sampling results within 45 days of the end of each reporting period.
3. The first reporting period shall begin on the effective date of permit coverage.
4. Upon permit coverage, the Permittee shall ensure that DMRs are postmarked or received by *Ecology* by the DMR Due Dates below:

Table 7: Reporting Dates and DMR Due Dates

Reporting Period	Months	DMR Due Date
1 st	January-March	May 15
2 nd	April-June	August 14
3 rd	July-Sept	November 14
4 th	October-December	February 14

5. DMRs shall be submitted using *Ecology*'s WAWebDMR system or by mail to the following address:

Department of Ecology
Water Quality Program – Industrial Stormwater
PO Box 47696
Olympia, Washington 98504-7696

6. Upon permit coverage, the Permittee shall submit a DMR each reporting period, whether or not the *facility* has discharged *stormwater* from the site.
 - a. If no *stormwater* sample was obtained from the site during a given reporting period, the Permittee shall submit the DMR form indicating “no sample obtained”, or “no discharge during the quarter”, as applicable.
 - b. If a Permittee has suspended sampling for a parameter due to consistent attainment, the Permittee shall submit a DMR and indicate that it has achieved Consistent Attainment for that parameter(s).

B. Annual Reports

1. The Permittee shall submit a complete and accurate Annual Report to the Department of *Ecology* no later than May 15th of each year (except 2010) using a form provided by or otherwise approved by *Ecology*.
2. The annual report shall include corrective action documentation as required in S8.B-D. If corrective action is not yet completed at the time of submission of this annual report, the Permittee must describe the status of any outstanding corrective action(s).
3. Permittees shall include the following information with each annual report. The Permittee shall:
 - a. Identify the condition triggering the need for corrective action review.
 - b. Describe the problem(s) and identify the dates they were discovered.
 - c. Summarize any Level 1, 2 or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.

- d. Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

4. Permittees shall retain a copy of all annual reports onsite for *Ecology* review.

C. Records Retention

1. The Permittee shall retain the following documents onsite for a minimum of five years:
 - a. A copy of this permit.
 - b. A copy of the permit coverage letter.
 - c. Records of all sampling information specified in Condition S4.B.3.
 - d. Inspection reports including documentation specified in Condition S7.
 - e. Any other documentation of compliance with permit requirements.
 - f. All equipment calibration records.
 - g. All BMP maintenance records.
 - h. All original recordings for continuous sampling instrumentation.
 - i. Copies of all laboratory reports as described in Condition S3.B.4.
 - j. Copies of all reports required by this permit.
 - k. Records of all data used to complete the *application* for this permit.
2. The Permittee shall extend the period of records retention during the course of any unresolved litigation regarding the *discharge of pollutants* by the Permittee, or when requested by *Ecology*.
3. The Permittee shall make all plans, documents and records required by this permit immediately available to *Ecology* or the local jurisdiction upon request; or within 14 days of a written request from *Ecology*.

D. Additional Sampling by the Permittee

If the Permittee samples any *pollutant* at a designated sampling point more frequently than required by this permit, then the Permittee shall include the results in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Reporting Permit Violations

1. In the event the Permittee is unable to comply with any of the terms and conditions of this permit which may endanger human health or the environment, or the facility experiences any *bypass* or upset which causes an exceedance of any effluent limitation in the permit, the Permittee shall:
 - a. Immediately take action to minimize potential *pollution* or otherwise stop the noncompliance and correct the problem.

- b. Immediately notify the appropriate *Ecology* regional office of the failure to comply.
- c. Submit a detailed written report to *Ecology* within 30 days unless *Ecology* requests an earlier submission. The Permittee's report shall contain:
 - i. A description of the noncompliance, including exact dates and times.
 - ii. Whether the noncompliance has been corrected and, if not, when the noncompliance will be corrected.
 - iii. The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 2. Compliance with the requirements of this section does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Public Access to SWPPP

The Permittee shall provide access to, or a copy of, the SWPPP to the public when requested in writing. Upon receiving a written request from the public for the SWPPP, the Permittee shall:

- 1. Provide a copy of the SWPPP to the requestor within 14 days of receipt of the written request; or
- 2. Notify the requestor within 10 days of receipt of the written request of the location and times within normal business hours when the requestor may view the SWPPP, and provide access to the SWPPP within 14 days of receipt of the written request; or
- 3. Provide a copy of the plans and records to *Ecology*, where the requestor may view the records, within 14 days of a request; or may arrange with the requestor for an alternative, mutually agreed upon location for viewing and/or copying of the plans and records. If access to the plans and records is provided at a location other than at an *Ecology* office, the Permittee will provide reasonable access to copying services for which it may charge a reasonable fee.

S10. COMPLIANCE WITH STANDARDS

- A. Discharges shall not cause or contribute to a violation of *Surface Water Quality Standards* (Chapter 173-201A WAC), *Ground Water Quality Standards* (Chapter 173-200 WAC), *Sediment Management Standards* (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR 131.36). Discharges that are not in compliance with these standards are prohibited.
- B. *Ecology* will presume compliance with *water quality standards*, unless *discharge* monitoring data or other site specific information demonstrates that a discharge causes or contributes to violation of *water quality standards*, when the Permittee is:

1. In full compliance with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.
 2. Fully implementing storm water *best management practices* contained in storm water technical manuals approved by the department, or practices that are *demonstrably equivalent* to practices contained in storm water technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.
- C. Prior to the *discharge* of *stormwater* and non-stormwater to *waters of the state*, the Permittee shall apply all known and reasonable methods of prevention, control, and treatment (*AKART*). To comply with this condition, the Permittee shall prepare and implement an adequate SWPPP, with all applicable and appropriate BMPs, including the BMPs necessary to meet the standards identified in Condition S10.A, and shall install and maintain the BMPs in accordance with the SWPPP, applicable SWMMs, and the terms and conditions of this permit.

S11. PERMIT FEES

- A. The Permittee shall pay permit fees assessed by *Ecology* and established in Chapter 173-224 WAC.
- B. *Ecology* will continue to assess permit fees until it terminates a permit in accordance with Special Condition S13 or revoked in accordance with General Condition G5.

S12. SOLID AND LIQUID WASTE MANAGEMENT

The Permittee shall not allow solid waste material or *leachate* to cause violations of the State Surface *Water Quality Standards* (Chapter 173-201A WAC), the *Ground Water Quality Standards* (Chapter 173-200 WAC) or the Sediment Management Standards (Chapter 173-204 WAC).

S13. NOTICE OF TERMINATION (NOT)

A. Conditions for a NOT

Ecology may approve a *Notice of Termination* (NOT) request when the Permittee meets one or more of the following conditions:

1. All permitted *stormwater* discharges associated with *industrial activity* that are authorized by this permit cease because the *industrial activity* has ceased, and no *significant materials* or *industrial pollutants* remain exposed to *stormwater*.
2. The party that is responsible for permit coverage (signatory to *application*) sells or otherwise legally transfers responsibility for the *industrial activity*.
3. All *stormwater* discharges associated with *industrial activity* are prevented because the *stormwater* is redirected to a *sanitary sewer*, or discharged to ground (e.g., infiltration, etc.).

B. Procedure for Obtaining Termination

1. The Permittee shall apply for a NOT on a form specified by *Ecology* (NOT Form).
2. The Permittee seeking permit coverage termination shall sign the NOT in accordance with Condition G2. of this permit.
3. The Permittee shall submit the completed NOT form to *Ecology* at the address in Condition S9.A.5.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this *general permit* shall be consistent with the terms and conditions of this *general permit*. Any *discharge* of any *pollutant* more frequently than, or at a level in excess of that identified and authorized by the *general permit*, shall constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

- A. All permit *applications* shall be signed:
1. In the case of corporations, by a responsible corporate officer of at least the level of vice president of a corporation.
 2. In the case of a partnership, by a general partner of a partnership.
 3. In the case of sole proprietorship, by the proprietor.
 4. In the case of a municipal, state, or other public *facility*, by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by *Ecology* shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
1. The authorization is made in writing by a person described above and submitted to the *Ecology*.
 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated *facility*, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.
- C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the *facility*, a new authorization satisfying the requirements of paragraph G2.B.2 above shall be submitted to *Ecology* prior to, or together with, any reports, information, or *applications* to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

“I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that *qualified personnel* properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there

are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of *Ecology*, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a *discharge* is located or where any records shall be kept under the terms and conditions of this permit.
- B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C. To inspect, at reasonable times, any facilities, equipment (including sampling and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the *Clean Water Act*.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A. When a change which occurs in the technology or practices for control or abatement of *pollutants* applicable to the category of *dischargers* covered under this permit.
- B. When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of *dischargers* covered under this permit.
- C. When a water quality management plan containing requirements applicable to the category of *dischargers* covered under this permit is approved.
- D. When information is obtained which indicates that cumulative effects on the environment from *dischargers* covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

- A. Pursuant with Chapter 43.21B RCW and Chapter 173-226 WAC, *Ecology* may terminate coverage for any *discharger* under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:
 - 1. Violation of any term or condition of this permit.
 - 2. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
 - 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

4. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
 5. A determination that the permitted activity endangers human health or the environment, or contributes to *water quality standards* violations.
 6. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.
 7. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.
- B. *Ecology* may require any *discharger* under this permit to apply for and obtain coverage under an individual permit or another more specific *general permit*.
- C. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within 90 days from the time of revocation and is submitted along with a complete individual permit *application* form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new *application*, or a supplement to the previous *application*, whenever a material change to the *industrial activity* or in the quantity or type of *discharge* is anticipated which is not specifically authorized by this permit. This *application* shall be submitted at least 60 days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the expiration date of this permit.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other *pollutants* removed in the course of treatment or control of *stormwater* shall not be resuspended or reintroduced to the final effluent stream for *discharge* to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to *Ecology*, within a reasonable time, all information which *Ecology* may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to *Ecology*, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL SAMPLING

Ecology may establish specific sampling requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of this permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G14. UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted *facility* was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S9.E; and 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the *Clean Water Act* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G17. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the *Clean Water Act* for toxic *pollutants* within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18. PENALTIES FOR TAMPERING

The *Clean Water Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate any sampling device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four years, or both.

G19. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to *Ecology* of planned physical alterations, modifications or additions to the permitted *industrial activity*, which will result in:

- A. The permitted *facility* being determined to be a new source pursuant to 40 CFR 122.29(b).

- B. A *significant process change*, as defined in the glossary of this permit.
- C. A change in the location of *industrial activity* that affects the Permittee's sampling requirements in Conditions S3, S4, S5, and S6.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any *pollutants* not previously limited. Until such modification is effective, any new or increased *discharge* in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G20. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit *application*, or submitted incorrect information in a permit *application* or in any report to *Ecology*, it shall promptly submit such facts or information.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to *Ecology* by submission of a new *application*, or supplement to the existing *application*, at least 45 days prior to commencement of such discharges, of any *facility* expansions, production increases, or other planned changes, such as process modifications, in the permitted *facility* or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by *Ecology*.

G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

- A. Any *discharger* authorized by this permit may request to be excluded from coverage under the *general permit* by applying for an individual permit.
- B. The *discharger* shall submit to *Ecology* an *application* as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons shall fully document how an individual permit will apply to the applicant in a way that the *general permit* cannot.
- C. *Ecology* may make specific requests for information to support the request. *Ecology* shall either issue an individual permit or deny the request with a statement explaining the reason for the denial.
- D. When an individual permit is issued to a *discharger* otherwise subject to the industrial *stormwater general permit*, the applicability of the industrial *stormwater general permit* to that Permittee is automatically terminated on the effective date of the individual permit.

G23. APPEALS

- A. The terms and conditions of this *general permit*, as they apply to the appropriate class of *dischargers*, are subject to appeal by any person within 30 days of issuance of this *general permit*, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this *general permit*, as they apply to an individual *discharger*, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that *discharger*. Consideration of an appeal of *general permit* coverage of an individual *discharger* is limited to the *general permit*'s applicability or nonapplicability to that individual *discharger*.
- C. The appeal of *general permit* coverage of an individual *discharger* does not affect any other *dischargers* covered under this *general permit*. If the terms and conditions of this *general permit* are found to be inapplicable to any individual *discharger(s)*, the matter shall be remanded to *Ecology* for consideration of issuance of an individual permit or permits.

G24. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or *application* of any provision of this permit to any circumstance, is held invalid, the *application* of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25. BYPASS PROHIBITED

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and *Ecology* may take enforcement action against a Permittee for *bypass* unless one of the following circumstances (A, B, or C) is applicable.

- A. *Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions*

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by *Ecology* prior to the *bypass*. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the *bypass*.

- B. *Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit*

This *bypass* is permitted only if:

- 1. *Bypass* is unavoidable to prevent loss of life, personal injury, or *severe property damage*. "*Severe property damage*" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*.

2. There are no feasible alternatives to the *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a *bypass* which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment *facility*.
3. *Ecology* is properly notified of the *bypass* as required in condition S9E of this permit.

C. *Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit*

The Permittee must notify *Ecology* at least thirty (30) days before the planned date of *bypass*. The notice must contain (1) a description of the *bypass* and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of *bypass* under each alternative; (5) a recommendation as to the preferred alternative for conducting the *bypass*; (6) the projected date of *bypass* initiation; (7) a statement of compliance with SEPA; (8) a request for modification of *water quality standards* as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the *bypass*.

For probable construction bypasses, the need to *bypass* is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to *bypass* is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the *bypass*.

Ecology will consider the following prior to issuing an administrative order for this type *bypass*:

1. If the *bypass* is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
2. If there are feasible alternatives to *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment *facility*.
3. If the *bypass* is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed *bypass* and any other relevant factors, *Ecology* will approve or deny the request. The public must be notified and given an opportunity to comment on *bypass* incidents of significant duration, to the extent feasible. Approval of a request to *bypass* will be by administrative order issued by *Ecology* under RCW 90.48.120.

APPENDIX 1 - ACRONYMS

BMP	Best Management Practice
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation & Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWA	Centralized Waste Treatment
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FWPCA	Federal Water Pollution Control Act
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
SARA	Superfund Amendment and Reauthorization Act
SEPA	State Environmental Policy Act
SIC	Standard Industrial Classification
SMCRA	Surface Mining Control and Reclamation Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality

APPENDIX 2 - DEFINITIONS

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

303(d)-listed water body means waterbodies as listed as Category 5 on Washington State's Water Quality Assessment.

Air Emission means a release of air contaminants into the ambient air.

AKART is an acronym for “all known, available, and reasonable methods of prevention, control, and treatment.” AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the *pollutants* and controlling *pollution* associated with a discharge.

Applicable TMDL means any *TMDL* which has been completed either before the issuance date of this permit or the date the permittee first obtains coverage under this permit, whichever is later.

Application means a request for coverage under this *general permit* pursuant to WAC 173-226-200. Also called a *Notice of Intent (NOI)*.

Best Management Practices (BMPs - general definition) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the *pollution of waters of the state*. BMPs include treatment systems, operating procedures, and practices to control: plant site *runoff*, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In this permit BMPs are further categorized as operational source control, structural source control, *erosion* and *sediment* control, and *treatment BMPs*.

Benchmark means a *pollutant* concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not *water quality standards* and are not numeric effluent limitations; they are indicator values.

Bypass means the intentional diversion of waste streams from any portion of a treatment *facility*.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a *sanitary sewer* and a *storm sewer*, and into which inflow is allowed by local ordinance.

Construction Activity means clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, industrial buildings, and demolition activity.

Control Plan means a *total maximum daily load (TMDL)* determination, restrictions for the protection of endangered species, a *ground water* management plan, or other limitations that regulate or set limits on discharges to a specific water body or *ground water* recharge area.

Demonstrably Equivalent means that the technical basis for the selection of all storm water *best management practices* are documented within a storm water *pollution* prevention plan. The storm water *pollution* prevention plan must document: 1) The method and reasons for choosing the storm water *best management practices* selected; 2) The *pollutant* removal performance expected from the practices selected; 3) The technical basis supporting the performance claims for the practices selected, including any available existing data concerning field performance of the practices selected; 4) An assessment of how the selected practices will comply with state *water quality standards*; and 5) An assessment of how the selected practices will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment.

Detention means the temporary storage of *stormwater* to improve quality and/or to reduce the mass flow rate of discharge.

Discharge [of a pollutant] means any addition of any *pollutant* or combination of pollutants to waters of the United States from any point source. This definition includes additions of pollutants into waters of the United States from: surface *runoff* which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, *municipality*, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharger means an owner or operator of any *facility* or activity subject to regulation under Chapter 90.48 RCW or the Federal *Clean Water Act*.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such *ground water* infiltration or surface waters as may be present.

Ecology means the Washington State Department of *Ecology*.

EPA means the United States Environmental Protection Agency.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of *stormwater discharge* to surface water or to *ground water* than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs that are intended to prevent *erosion* and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and *sediment* traps and ponds.

Existing Facility means a *facility* that was in operation prior to the effective date of this permit. It also includes any *facility* that is not categorically included for coverage but is in operation when identified by *Ecology* as a *significant contributor of pollutants*.

Facility means any NPDES “point source” (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

General Permit means a permit which covers multiple *dischargers* of a point source category within a designated geographical area, in lieu of individual permits being issued to each *discharger*.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface water body.

Illicit Discharge means any *discharge* that is not composed entirely of *stormwater* except (1) discharges authorized pursuant to a separate NPDES permit, or (2) conditionally authorized non-*stormwater* discharges identified in Condition S5.D.

Inactive Facility means a *facility* that no longer engages in business, production, providing services, or any auxiliary operation.

Industrial Activity means (1) the 11 categories of industrial activities identified in 40 CFR 122.26(b)(14)(i-xi) that must apply for either coverage under this permit or no exposure certification, (2) any *facility* conducting any activities described in Table 1, and (3) identified by *Ecology* as a *significant contributor of pollutants*. Table 1 lists the 11 categories of industrial activities identified in 40 CFR 122.26(b)(14)(i-xi) in a different format.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a *land application site*, surface impoundment, injection well, or waste pile.

Land Application Site means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Leachate means water or other liquid that has percolated through raw material, product or waste and contains substances in solution or suspension as a result of the contact with these materials.

Local Government means any county, city, or town having its own government for local affairs.

Material Handling means storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product.

Municipality means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the *discharge of pollutants to surface waters of the state* from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

New Development means land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

New Discharge(r) means a *facility* from which there is a discharge, that did not commence the *discharge* at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Facility means a *facility* that begins activities that result in a *discharge* or a potential discharge to *waters of the state* on or after the effective date of this *general permit*.

Noncontact Cooling Water means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

Notice of Termination (NOT) means a request for termination of coverage under this *general permit* as specified by Special Condition S13 of this permit.

Operational Source Control BMPs means schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the *pollution of waters of the state*. Not included are BMPs that require construction of *pollution* control devices.

Pollutant means the *discharge* of any of the following to *waters of the state*: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of *waters of the state*; including change in temperature, taste, color, *turbidity*, or odor of the waters; or such *discharge* of any liquid, gaseous, solid, radioactive or other substance into any *waters of the state* as will or is likely to create a nuisance or render such waters harmful,

detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish, or other aquatic life.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Qualified Personnel means those who possess the knowledge and skills to assess conditions and activities that could impact *stormwater* quality at the *facility*, and evaluate the effectiveness of *best management practices* required by this permit.

Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) means the lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

Reasonable Potential means the likely probability for *pollutants* in the *discharge* to exceed the applicable water quality criteria in the receiving water body.

Redevelopment means on a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

Regular Business Hours means those time frames when the *facility* is engaged in its primary production process, but does not include additional shifts or weekends when partial staffing is at the site primarily for maintenance and incidental production activities. *Regular business hours* do not include periods of time that the *facility* is inactive and *unstaffed*.

Representative [sample] means a sample of the *discharge* that accurately characterizes *stormwater runoff* generated in the designated drainage area of the *facility*.

Runoff means that portion of rainfall or snowmelt water not absorbed into the ground that becomes surface flow.

Sanitary Sewer means a sewer which is designed to convey *domestic wastewater*.

Sediment means the fragmented material that originates from the weathering and *erosion* of rocks, unconsolidated deposits, or unpaved yards, and is transported by, suspended in, or deposited by water.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*. *Severe property damage* does not mean economic loss caused by delays in production.

Significant Amount means an amount of a *pollutant* in a *discharge* that is amenable to available and reasonable methods of prevention, control, or treatment; or an amount of a *pollutant* that has a *reasonable potential* to cause a violation of surface or *ground water quality standards* or *sediment management standards*.

Significant Contributor of Pollutant(s) means a *facility* determined by *Ecology* to be a contributor of a *significant amount(s)* of a *pollutant(s)* to *waters of the state*.

Significant Materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the *facility* is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with *stormwater* discharges.

Significant Process Change means any modification of the *facility* that would result in any of the following:

1. Add different *pollutants* in a *significant amount* to the discharge.
2. Increase the *pollutants* in the *stormwater discharge* by a *significant amount*.
3. Add a new *industrial activity* (SIC) that was not previously covered.
4. Add additional impervious surface or acreage such that *stormwater* discharge would be increased by 25% or more.

Source Control BMPs means structures or operations that are intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. This permit separates source control into two types: *structural source control BMPs* and *operational source control BMPs*.

Standard Industrial Classification (SIC) is the statistical classification standard underlying all establishment-based federal economic statistics classified by industry as reported in the 1987 SIC Manual by the Office of Management and Budget.

State Environmental Policy Act (SEPA) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Storm Sewer means a sewer that is specifically designed to carry *stormwater*. Also called a storm drain.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a *stormwater drainage system* into a defined surface water body, or a constructed infiltration *facility*.

Stormwater Discharge Associated with Industrial Activity means the *discharge* from any conveyance that is used for collecting and conveying *stormwater* and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant (see 40 CFR 122(b)(14)).

Stormwater Drainage System means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate or divert *stormwater*.

Stormwater Management Manual (SWMM) or Manual means the technical manuals prepared by Ecology for *stormwater* management in western and eastern Washington.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of *stormwater*.

Structural Source Control BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent *pollutants* from entering *stormwater*.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state.

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a *pollutant* that a water body can receive and still meet state *water quality standards*. Percentages of the *total maximum daily load* are allocated to the various *pollutant* sources. A *TMDL* is the sum of the allowable loads of a single *pollutant* from all contributing point and nonpoint sources. The *TMDL* calculations include a "margin of safety" to ensure that the water body can be protected in case there are unforeseen events or unknown sources of the *pollutant*. The calculation also accounts for seasonable variation in water quality.

Treatment BMPs means BMPs that are intended to remove *pollutants* from *stormwater*.

Turbidity means the clarity of water expressed as nephelometric *turbidity* units (NTU) and measured with a calibrated turbidimeter.

Underground Injection Control Well means a well that is used to *discharge* fluids into the subsurface. An *underground injection control well* is one of the following:

1. A bored, drilled, or driven shaft,
2. An improved sinkhole, or
3. A subsurface fluid distribution system. (WAC 173-218-030)

Unstaffed means the *facility* has no assigned staff. A site may be “*unstaffed*” even when security personnel are present, provided that *pollutant* generating activities are not included in their duties.

Vehicle means a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Vehicle Maintenance means the rehabilitation, mechanical repairing, painting, fueling, and/or lubricating of a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Wasteload Allocation (WLA) means the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of *pollution*. WLAs constitute a type of water quality based effluent limitation (*40 CFR* 130.2(h)).

Water Quality Standards means the Water Quality Standards for *Surface Waters of the State* of Washington, Chapter 173-201A WAC, Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (*40 CFR* 131.36).

Waters of the State includes those waters defined as "waters of the United States" in *40 CFR* Subpart 122.2 within the geographic boundaries of Washington State. State statute defines "*waters of the state*" to include lakes, rivers, ponds, streams, wetlands, inland waters, *underground waters*, salt waters and all other surface waters and water courses within the jurisdiction of the state of Washington (Chapter 90.48 RCW).

APPENDIX 3 - SWPPP CERTIFICATION FORM

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐ Yes ☐ No

If Yes:

- Type of Corrective Action?: ☐ Level 1 ☐ Level 2 ☐ Level 3
- Date SWPPP update/revision completed: _____.

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Operator's Printed Name *

Title

Operator's Signature *

Date

* Federal regulations require this document to be signed as follows:

For a corporation, by a principal executive officer of at least the level of vice president;
For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

This document shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Changes to authorization. If an authorization under number 2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of number 2 above shall be submitted to Ecology prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

APPENDIX 4 - EXISTING DISCHARGERS TO IMPAIRED WATER BODIES

This appendix has a link below to a website list of existing Permittees that *discharge pollutants* of concern to impaired water bodies.

<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/permitdocs/iswgpapp4.pdf>

This list is based on the best information available to *Ecology*. There will be changes and updates to this list based on new, more accurate information. If changes or updates are made, *Ecology* will notify the affected permittees directly. Such changes or updates will not become effective until 30 days after the affected *dischargers* are notified.

This list is generated by comparing the *discharge* point of each individual *discharger* permitted under the Industrial Stormwater General Permit with the 2008 list of Category 5 impaired waters (the *303(d)* list), approved by US EPA on January 29, 2009.

APPENDIX 5 - DISCHARGERS SUBJECT TO TMDL REQUIREMENTS

The list of *dischargers* identified as discharging to water bodies which have completed water quality clean-up plans or *TMDLs* and associated monitoring requirements can be viewed on *Ecology's* website at: <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>

The most current list can also be obtained by contacting Ecology at:

Industrial Stormwater General Permit
Washington State Department of Ecology
P.O. Box 47696
Olympia, WA 98504-7600

This list is based on the best information available to *Ecology*. There will be changes and updates to this list based on new, more accurate information. If changes or updates are made, *Ecology* will notify the affected permittees directly. Such changes or updates will not become effective until 30 days after the affected *dischargers* are notified.

10.2 Attachment B: Stormwater Permit

Stormwater Pollution Prevention Plan (SWPPP)

for:

Pacific Pile & Marine Main Yard
700 S Riverside Dr
Seattle, WA 98108
206-331-3873

SWPPP Contact(s):

Pacific Pile & Marine
Insert Name
700 S Riverside Dr
Seattle, WA 98108
206-331-3873
206-774-5958

SWPPP Preparation Date:

02/17/2014

Contents

Section 1. Facility Description and Contact Information	1
1.1 Facility Information	1
1.2. Contact Information/Responsible Parties	2
1.3. General Location Map (Optional).....	2
1.4. Site Map	3
1.5. Stormwater Pollution Prevention Team.....	4
Section 2. Facility Assessment	4
2.1. Facility Description.....	4
2.2. Industrial Activity, Materials Inventory, and Associated Pollutants	5
2.3. Spills and Leaks	7
Section 3. Best Management Practices (BMPs)	8
3.1 Operational Source Control BMP	8
3.2. Structural Source Control BMPs	14
3.3. Treatment BMPs	15
3.4. Stormwater Peak Runoff and Volume Control BMPs	Error! Bookmark not defined.
3.5. Erosion and Sediment Control BMPs	18
Section 4. Sampling Plan	19
Section 5. SWPPP Certification	23
SWPPP Appendices	25
Appendix C. Blank Worksheets for Development of the SWPPP	
Appendix D. SWPPP Certification Form	D-1
Appendix E. List of Applicable Industry-Specific Source Control BMPs	E-1
Appendix F. Industrial Stormwater Monthly Inspection Report.....	1

Section 1. Facility Description and Contact Information

1.1 Facility Information

Instructions:

- Detailed information on determining your site's latitude and longitude can be found at www.epa.gov/npdes/stormwater/latlong.
- Use this link to enter your address to determine your site's latitude and longitude: <http://www.mashupsoft.com/maps/latlonlocator>

Facility Information

Name of Facility: Pacific Pile & Marine Main Yard

Street: 700 S Riverside Dr

City: Seattle State: WA ZIP Code: 98108

County: King

Permit Number: WAR 301516

Latitude/Longitude - Use **one** of three possible formats, and specify method (Optional)

Latitude:

1. 47 ° 53 ' 4215" N (degrees, minutes, seconds)

2. __ ° __ . __ ' N (degrees, minutes, decimal)

3. __ . __ __ ° N (decimal)

Longitude:

1. 122 ° 32' 4757" W (degrees, minutes, seconds)

2. __ ° __ . __ ' W (degrees, minutes, decimal)

3. __ . __ __ ° W (decimal)

Estimated area of industrial activity at site exposed to stormwater: 1.01 (acres)

Discharge Information

Does this facility discharge stormwater into surface waters? ☐ Yes ☒ No

Does this facility discharge stormwater into a municipal storm water conveyance system? ☐ Yes ☒ No

SIC Code(s): 4920, 1629

(You can look up your SIC Code at this website: <http://www.osha.gov/pls/imis/sicsearch.html>)

1.2. Contact Information/Responsible Parties

Instructions:

- List the facility operator(s), facility owner, and 24 hour emergency contact. Indicate respective responsibilities, where appropriate.

Facility Operator (s):

Name: Pacific Pile & Marine

Address: 700 S Riverside Dr

City, State, Zip Code: Seattle, WA, 98108

Telephone Number: 206-331-3873 Cell Phone Number: (optional)

Email address: carrien@pacificpile.com

Fax number: 206-774-5958

Facility Owner (s):

Name: Insert Name

Address: Insert Address

City, State, Zip Code: Insert City, State, Zip Code

Telephone Number: Insert Telephone Number

Email address: Insert email address

Fax number: Insert fax number (optional)

SWPPP Contact:

Name: Wilbur Clark

Telephone number: 206-331-3873 Cell Phone Number: Insert Telephone Number (optional)

Email address: jc@pacificpile.com

Fax number: Insert fax number (optional)

1.3. General Location Map (Optional)

Instructions:

- Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges (Appendix A).

Include a copy of the general location map for this facility in Appendix A.

1.4. Site Map

Instructions (see S3.B.1. pg. 14 of the ISWGP):

Include a map showing the following information:

- The scale or include relative distances between significant structures and drainage systems.
- Significant features.
- The stormwater drainage and discharge structures and identify, by name, any other party other than the Permittee that owns any stormwater drainage or discharge structures.
- The stormwater drainage areas for each stormwater discharge point off-site (including discharges to ground water) and assign a unique identifying number for each discharge point.
- Each sampling location by unique identifying number.
- Paved areas and buildings.
- Areas of pollutant contact (actual or potential) associated with specific industrial activities.
- Conditionally approved non-stormwater discharges (Condition S5.D).
- Surface water locations (including wetlands and drainage ditches).
- Areas of existing and potential soil erosion (in a significant amount).
- Vehicle maintenance areas.
- Lands and waters adjacent to the site that may be helpful in identifying discharge points or drainage routes.

Include a copy of the site map for this facility in Appendix B.

1.5. Stormwater Pollution Prevention Team

Instructions (S3.B.3. pg.16 of the ISWGP):

- Identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities.
- Your stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP, implementing and maintaining control measures/BMPs, and taking corrective actions where required. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of the ISWGP and your SWPPP.

Staff Names and/or Title	Individual Responsibilities
Wilbur Clark	In charge of SWPPP updates, monitoring, QA/QC, and reporting
Donny Gilbertson	BMP maintenance/implementation, monthly inspections
Craig Cearley	QA/QC
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]

[Insert text here](#)

Section 2. Facility Assessment

Instructions (see S3.B.2.a.- c. pg. 15 of the ISWGP).

In this section, you are required to include a description of the facility; an inventory of facility activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater; and, an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater.

2.1. Facility Description

Instructions (see S3.B.2.a. pg. 15 of the ISWGP).

In this section, you are required to include a description of the facility:

- The industrial activities conducted at the site.
- Regular business hours and seasonal variations in business hours or industrial activities.
- The general layout of the facility including buildings and storage of raw materials, and the flow of goods and materials through the facility.

Industrial Activity: The site is a transloading facility for marine equipment and materials related to construction activities. Equipment such as cranes, forklifts, and excavators are moved from the facility to barges on the water. Material such as concrete floats, metal and wood piling, and dredge sediment are transloaded to and from barges to the facility.

Regular Business Hours: General business hours are Monday through Friday, 7am to 4pm.

General Layout: The facility consists of one building located on the southwest corner of the property. There is a concrete pad extending approximately 20' around the building's perimeter. A dock structure is located on the east portion of the property running parallel with the Duwamish River. The dock is approximately 30' deep and 200' long. The dock connects directly to the main yard which consist of crushed rock. Material and equipment is delivered through gates located on the west end of the facility.

2.2. Industrial Activity, Materials Inventory, and Associated Pollutants

Instructions (S3.B.2.b.- c. pg. 15 of the ISWGP and Worksheets #2, #2A, #3, #5 in Appendix C):

In this section, identify all areas associated with **industrial activities** that have been or may potentially be sources of pollutants, including, but not limited to, the following:

- Loading and unloading of dry bulk materials or liquids.
- Outdoor storage of materials or products.
- Outdoor manufacturing and processing.
- On-site dust or particulate generating processes.
- On-site waste treatment, storage, or disposal.
- Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
- Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area
- Roofs or other surfaces composed of materials that may be mobilized by stormwater (e.g., galvanized roofs, galvanized fences, etc.).

Also, identify the types of materials handled at the site that potentially may be exposed to precipitation or runoff and could result in stormwater pollution.

For each **industrial activity** or **exposed material** listed, provide a short narrative (in the **Associated Pollutant** column) describing the potential of pollutant(s) to be present in stormwater discharges. For example:

- Structures and materials with galvanized metal would be a potential source of zinc.
See Suggested Practices to Reduce Zinc Concentrations in Industrial Stormwater Discharges:
<http://www.ecy.wa.gov/biblio/0810025.html>
- Fueling/vehicle maintenance areas would be a potential source of petroleum and other pollutants.
- Yards surfaced with crushed rock or gravel would be a potential source of sediment, turbidity, and other pollutants depending on industrial activity.

The Permittee must update this narrative if/when data become available to verify the presence or absence of these pollutants.

Include a narrative description of any potential sources of pollutants from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to stormwater. For example,

- A material handling area that has been subject to fertilizer spills would be a potential source of phosphorus, nitrogen and other pollutants.

Include the method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.

Industrial Activity / Exposed Materials	Associated Pollutants
Fueling of equipment	Petroleum and petroleum by-products
Storage of metal piling and misc steel	Iron oxides and iron oxide-hydroxide
Gravel/crushed rock yard	Sediment and turbidity
Transloading of dredge sediment	Turbidity, misc contaminants depending on dredge sediment (dioxins, PCBs, hydrocarbons, etc)
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]

2.3. Spills and Leaks

Instructions:

- Include the following in this section:
 - **Potential spills and leaks:** A description of where potential spills and leaks could occur at your site that could contribute pollutants to your stormwater discharge, and specify which outfall(s) are likely to be affected by such spills and leaks.
 - **Past spills and leaks (Use Worksheet #4):** A description of significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance.
- *Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.*

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Spills or leaks could occur in the main yard from equipment malfunction	None
Spill or leak could occur on the dock where soil is being transloaded from the barge to the dock	No outfall but it is directly over the river so spill or leak could directly reach river.
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]

Section 3. Best Management Practices (BMPs)

Instructions (See S3.B.4. pg 16 of the ISWGP):

- You must describe each Best Management Practice (BMP) selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*.
- No later than July 1, 2010, you must include and implement each of the mandatory BMPs listed in the permit, including the BMPs from Volume IV of the Stormwater Management Manual for Western Washington or equivalent manuals, listed as “applicable” to certain industrial activities/facilities: <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/StrmwtrMan.html>
- Appendix E of this Template contains the BMPs from the Stormwater Management Manuals that are applicable to certain industrial activities or facilities. “Cut” each applicable BMP that pertains to your type industrial activity/facility from Appendix E, and “paste” them into the appropriate section(s).
- The Permittee may omit individual (mandatory or applicable) BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP. For example:
 - The permit requirement to have a spill kit located within 25’ of fueling areas would not be necessary at a facility that does not have on-site fueling. The SWPPP should state that the spill kit BMP has been omitted from the SWPPP because it is unnecessary.
- Prior to July 1, 2010, the Permittee shall implement the BMP requirements of the previous Industrial *Stormwater General Permit*, or Condition S3.B.4 of this permit.

3.1 Operational Source Control BMP

Good Housekeeping

Instructions (see S3.B.4.b.i.2 Good Housekeeping pg. 16 of the ISWGP):

Describe BMPs implemented for ongoing maintenance and cleanup of areas which may contribute pollutants to stormwater discharges. The SWPPP must include the schedule/frequency for completing each housekeeping task, based upon industrial activity, sampling results and/or observations made during inspections. At a minimum the following Good Housekeeping BMPs are mandatory. The Permittee may omit individual “mandatory” BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

Mandatory Operational Source Control BMPs required by condition S3. of the Industrial Stormwater General Permit:

Good Housekeeping:

- Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants a minimum of once per quarter.
- Identify and control all on-site sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation.
- Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.
- Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Good Housekeeping Operational and Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory.
- Promptly contain and clean up solid and liquid pollutant leaks and spills including oils, solvents, fuels, and dust from manufacturing operations on any exposed soil, vegetation, or paved area.
- Use solid absorbents, e.g., clay and peat absorbents and rags for cleanup of liquid spills/leaks, where practicable.
- Empty drip pans immediately after a spill or leak is collected in an uncovered area.

Preventive Maintenance:

Instructions (see S3.B.4.b.i.3 Preventative Maintenance pg. 16 of the ISWGP):

Describe BMPs to inspect and maintain the stormwater drainage, source controls and treatment systems, and/or other equipment and systems that could fail and result in contamination of stormwater. The SWPPP shall include the schedule/frequency for completing each maintenance task. At a minimum the following Good Housekeeping BMPs are mandatory. The Permittee may omit individual “mandatory” BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

Preventive Maintenance:

- Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.
- Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and vehicles out of service or prevent leaks from spilling on the ground until repaired.
- Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.
- Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Preventative Maintenance Operational and Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory.
- For the temporary storage of solid wastes contaminated with liquids or other potential polluted materials use dumpsters, garbage cans, drums, and comparable containers, which are durable,

corrosion resistant, non-absorbent, non-leaking, and equipped with either a solid cover or screen cover to prevent littering. If covered with a screen, the container must be stored under a roof or other form of adequate cover.

- Prevent the discharge of unpermitted liquid or solid wastes, process wastewater, and sewage to ground or surface water, or to storm drains that discharge to surface water, or to the ground. Conduct all oily parts cleaning, steam cleaning, or pressure washing of equipment or containers inside a building, or on an impervious contained area, such as a concrete pad. Direct contaminated stormwater from such an area to a sanitary sewer where allowed by local sewer authority, or to other approved treatment.
- Construct impervious areas that are compatible with the materials handled. Portland cement concrete, asphalt, or equivalent material may be considered.
- At industrial and commercial facilities, drain oil and fuel filters before disposal. Discard empty oil and fuel filters, oily rags, and other oily solid waste into appropriately closed and properly labeled containers, and in compliance with the Uniform Fire Code or International Building Code.
- Use drip pans to collect leaks and spills from industrial/ commercial equipment such as cranes at ship/boat building and repair facilities, log stackers, industrial parts, trucks and other vehicles stored outside.
- For the storage of liquids use containers, such as steel and plastic drums, that are rigid and durable, corrosion resistant to the weather and fluid content, non-absorbent, water tight, rodent-proof, and equipped with a close fitting cover.

Spill Prevention and Emergency Cleanup:

Instructions (see S3.B.4.b.i.4 Spill Prevention and Emergency Cleanup Plan pg. 17 of the ISWGP):

Include a Spill Prevention and Emergency Cleanup Plan (SPECP) that includes BMPs to prevent spills that can contaminate stormwater. The SPECP shall specify BMPs for material handling procedures, storage requirements, cleanup equipment and procedures, and spill logs, as appropriate.

- Describe any BMPs or procedures used to minimize the potential for leaks, spills, and other releases.
- Describe where each BMP is to be located or where applicable procedures will be implemented (pg 17-18, S3.B.4.b.i.4.a-i) at your site.
- Note: Some facilities may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan. Such a plan may be included by reference if it contains these necessary elements.)

Spill Prevention and Emergency Cleanup:

- Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.

- Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a written plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.
- Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include:
 - Oil absorbents capable of absorbing 15 gallons of fuel.
 - A storm drain plug or cover kit.
 - A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.
 - A non-metallic shovel.
 - Two five-gallon buckets with lids.
- Not lock shut-off fueling nozzles in the open position. Do not “topoff” tanks being refueled.
- Block, plug or cover storm drains that receive runoff from areas where fueling, during fueling.
- Use drip pans or equivalent containment measures during all petroleum transfer operations.
- Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas).
- Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible. Drain fluids from equipment and vehicles prior to on-site storage or disposal.
- Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.
- Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Spill Prevention Operational and Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory.
- Stop, contain, and clean up all spills immediately upon discovery.
- If pollutant materials are stored on-site, have spill containment and cleanup kits readily accessible.
- If the spill has reached or may reach a sanitary or a storm sewer, ground water, or surface water notify the local jurisdiction, Ecology, and the local sewer authority immediately. Notification must comply with and federal spill reporting requirements.
- Do not flush or otherwise direct absorbent materials or other spill cleanup materials to a storm drain. Collect the contaminated absorbent material as a solid and place in appropriate disposal containers.

Employee Training

Instructions (see S3.B.4.b.i.5 Employee Training) pg. 18 of the ISWGP):

- Describe your plan for training the employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of the ISWGP, including all members of your Pollution Prevention Team. Included in your description must be the frequency and schedule of training (note: you are required under the ISWGP to provide proof of training of at least one time per year).

Be sure to address the following items in this section:

- The content of the training:
 - An overview of what is in the SWPPP.
 - How employees make a difference in complying with the SWPPP and preventing contamination of stormwater.
 - Spill response procedures, good housekeeping, maintenance requirements, and material management practices.
- How the Permittee will conduct training.
- The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.
- A log of the dates on which specific employees received training.
- Identifying pollutant sources
- Understanding pollutant control measures
- Responding to spills
- Handling practices that are environmentally acceptable. Particularly those related to vehicle/equipment liquids such as fuels, and vehicle/equipment cleaning.

Inspections, Reporting, and Recordkeeping

Instructions (see S3.B.4.b.i.6 Inspections and Recordkeeping pg. 18; S7 INSPECTIONS and S9 REPORTING AND RECORDKEEPING of the ISWGP):

- The Permittee must conduct and document visual inspections of the site each month.
- The Permittee must ensure that inspections are conducted by qualified personnel.
- Definition: *Qualified Personnel* means people who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit.
- Describe the documentation procedures for inspections and recordkeeping below. Documentation of monthly inspections must be kept on-site available for Ecology inspection (use Inspection Report Form in Appendix F).

- Identify facility personnel who will inspect designated equipment and facility areas as required in Condition S7.
- Contain a visual inspection report or check list that includes all items required by Condition S7.C.
- Provide a tracking or follow-up procedure to ensure that a report is prepared and any appropriate action taken in response to visual inspections.
- Define how the Permittee will comply with signature requirements and records retention identified in Special Condition S9, Reporting and Recordkeeping Requirements.
- Include a certification of compliance with the SWPPP and permit for each inspection using the language in S7.C.1.c.

INSERT DESCRIPTION OF PLAN FOR MONTHLY INSPECTION, QUARTERLY DMR REPORTING, ANNUAL CORRECTIVE ACTION REPORTING, AND RECORDKEEPING. INCLUDE REPORTING PERMIT VIOLATION PROCEDURES (PG 39 9SE.) HERE.

Illicit Discharges

Instructions (see S3.B.4.b.i.7. pg. 19):

- The SWPPP must include measures to identify and eliminate the discharge of process wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater sewers, or to surface waters and ground waters of the state.
- The Permittee can find BMPs to identify and eliminate illicit discharges in Volume IV of Ecology's SWMM for Western Washington and Chapter 8 of the SWMM for Eastern Washington:
<http://www.ecy.wa.gov/programs/wq/stormwater/municipal/StrmwtrMan.html>
- Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater. The Permittee must not allow this process wastewater to comeingle with stormwater or enter storm drains; and must collect in a tank for off-site disposal, or discharge it to a sanitary sewer, with written approval from the local sewage authority.
- The following text would be an acceptable way to address this permit condition and should be retained or modified, as appropriate.

Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater. The Permittee must not allow this process wastewater to comeingle with stormwater or enter storm drains; and must collect in a tank for off-site disposal, or discharge it to a sanitary sewer, with written approval from the local sewage authority.

During each monthly site inspection, look for signs of illicit discharges, especially during dry weather when stormwater isn't discharging from the site. Each monthly site inspection will include:

- Observations made at stormwater sampling locations and areas where stormwater associated with industrial activity is discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state.
- Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).
- Observations for the presence of illicit discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including leachate).
 - If an illicit discharge is discovered, the Permittee shall notify Ecology within seven days.
 - The Permittee shall eliminate the illicit discharge within 30 days.

3.2. Structural Source Control BMPs

Instructions (see S3.B.4.ii. Structural Source Control pg. 19 of the ISWGP):

Describe BMPs to minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.

Mandatory Structural Source Control BMPs required by Condition S3. of the Industrial Stormwater General Permit:

- Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations).
- Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and run-on and also that capture any overspray.
- Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the stormwater drainage system.
- Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the "applicable" Structural Source Control BMPs listed in Ecology's SWMMs, or other guidance documents as mandatory. **NOTE: Ecology has provided a list of BMPs applicable to certain industrial activities or facilities in Appendix E. "Cut" the Structural Source Control BMPs that apply to your industrial activity from Appendix E, and "paste" them here:**
- Consistent with Uniform Fire Code requirements (Appendix IV-D R.2) and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building, under a roof, or lean-to, or other appropriate cover.

- Berm, dike, and/or slope the loading/unloading area to prevent run-on of stormwater and to prevent the runoff or loss of any spilled material from the area.
- Large loading areas frequently are not curbed along the shoreline. As a result, stormwater passes directly off the paved surface into surface water. Place curbs along the edge, or slope the edge such that the stormwater can flow to an internal storm drain system that leads to an approved treatment BMP.
- Pave and slope loading/unloading areas to prevent the pooling of water. The use of catch basins and drain lines within the interior of the paved area must be minimized as they will frequently be covered by material, or they should be placed in designated “alleyways” that are not covered by material, containers or equipment.
- Conduct all maintenance and repair of vehicles and equipment in a building, or other covered impervious containment area that is sloped to prevent run-on of uncontaminated stormwater and runoff of contaminated stormwater.
- The maintenance of refrigeration engines in refrigerated trailers may be conducted in the parking area with due caution to avoid the release of engine or refrigeration fluids to storm drains or surface water.
- Park large mobile equipment, such as cranes, in a designated contained area.
- A spill apron will be located on the swing radius of the excavator between the barge and the dock. A geotextile liner will be placed across the spill apron and directly in front of the excavator in the load area. On top of the geotextile liner will be a PVC and polyethylene liner to collect any spilt sediments and direct rainwater to the gravel site.
- The spill apron will be 16’ wide and span from the dock to approximately a third of the way in the barge. The apron will be in a triangular shape so material lost from the bucket can return to the barge or catch basin on the dock. The spill apron will have rails on the sides to keep material from spilling off the sides of the apron.
- Rumble strips and crushed rock will be placed after the geotextile fabric to ensure all sediment is removed from the trucks before entering public roads.
-

3.3. Treatment BMPs

Instructions: The previously listed operational and structural source control BMPs are designed to prevent the contact of stormwater with pollutants. Contamination of stormwater can still occur in spite of source control BMPs. Develop a list of treatment BMPs to address this residual pollution, including the Mandatory BMPs in the Permit, and “Applicable BMPs” from the Stormwater Management Manuals. Include any existing stormwater controls at the site (e.g., oil/water separators, vaults, catch basins, swales, etc.) and discuss their effectiveness at reducing contamination of discharges.

Treatment BMPs include all BMPs that are intended to remove pollutants from stormwater. Some treatment BMPs only addresses certain pollutant types (e.g., sediment, petroleum hydrocarbons, metals, etc.); some address combinations of pollutant types. Examples of treatment BMPs include, but are not limited to:

- Detention or retention basins and vaults
- Oil/water separators
- Infiltration basins or trenches
- Bio-filtration (or Bio-infiltration) swales
- Media (e.g. compost, etc.) filters, including downspout media filters and catch basin media filters
- Sand Filters
- Advanced chemical treatment structures including chitosan enhanced sand filtration systems, and electro-coagulation systems (need prior approval by Ecology).

For each treatment BMP or structure at your facility, fill out a copy of the following table with the appropriate information (cut/paste additional tables, if necessary). Additional treatment BMPs added over time (e.g., Level 3 corrective actions) need to be included in this section.

Structure:

Date of Implementation:

Discharge Point:

Area(s) Treated:

Pollutants Removed:

Maintenance Requirement(s):

Frequency:

Structure:

Date of Implementation:

Discharge Point:

Area(s) Treated:

Pollutants Removed:

Maintenance Requirement(s):

Frequency:

Mandatory Treatment BMPs required by Condition S3. of the Industrial Stormwater General Permit

(See Condition **S3.B.4.b.iii** of the permit (**beginning on pg. 20**) for more information):

- Condition S3 of the Industrial Stormwater General Permit requires permittees to implement Treatment BMPs listed as “applicable” in Ecology’s SWMMs, or other approved guidance documents (see Condition S3.A.3).

- The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.
- Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
 - Many “off the shelf” oil removal BMPs are available (Absorptive booms, skimmers, pads, etc.)
 - If an **oil/water separator** needs to be designed and installed, refer to:
 - Stormwater Management Manual for Western WA (Vol. V, Ch.11):
<http://www.ecy.wa.gov/biblio/0510033.html>
 - Stormwater Management Manual for Eastern WA (Chapter 5.10)
<http://www.ecy.wa.gov/pubs/0410076.pdf>
- Obtain Ecology approval before beginning construction/installation of all treatment BMPs that include the addition of chemicals to provide treatment (e.g., polymer enhanced sand-filter systems, electro-coagulation systems, etc).

Applicable Treatment BMPs from Ecology’s Stormwater Management Manual for Western Washington

NOTE: Only include the Treatment BMPs that are relevant to your type of operation/industry:

Treatment BMPs for Maintenance and Repair of Vehicles and Equipment (Delete if not applicable to your facility):

- Contaminated stormwater runoff from vehicle staging and maintenance areas must be conveyed to a sanitary sewer, if allowed by the local sewer authority, or to an API or CP oil and water separator followed by a basic treatment BMP, applicable filter, or other equivalent oil treatment system.

Treatment BMPs for Parking and Storage of Vehicles and Equipment (Delete if not applicable to your facility):

- An oil removal system such as an API or CP oil and water separator, catch basin filter, or equivalent BMP, approved by the local jurisdiction, is applicable for parking lots meeting the threshold vehicle traffic intensity level of a high-use site.

A high-use site is:

- Subject to an expected average daily vehicle traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area: or
- Is subject to storage of a fleet of 25 or more diesel vehicles that are over 10 tons gross weight (trucks, buses, trains, heavy equipment, etc.).

3.5. Erosion and Sediment Control BMPs

Refer to Permit Condition ([S3.B.4.b.iv. pg. 20](#)):

The SWPPP must describe the erosion and sediment control BMPs necessary to prevent off-site sedimentation and violations of water quality standards. The Permittee shall implement and maintain:

- 1) Sediment control BMPs such as detention or retention ponds or traps, vegetated filter strips, bioswales, or other permanent sediment control BMPs to minimize sediment loads in stormwater discharges.
- 2) Filtration BMPs to remove solids from catch basins, sumps or other stormwater collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

Definition:

Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds.

Instructions: Develop a list of BMPs used to prevent the erosion of earthen materials (soil, sand, gravel, etc.) that can cause off-site sedimentation and turbidity. Include any existing BMPs at the site and discuss their effectiveness at reducing contamination erosion and sediment. Typical practices include:

- Areas that are not paved are covered with landscaping or well maintained vegetation that prevents soil erosion.
- Runoff is routed to a detention or retention basin
- Catch basin inserts (filter socks) are installed in catch basin
- Impervious areas are not curbed to promote sheet flow onto vegetated areas
- A bioswale, sandfilter or other treatment structures is used to treat runoff.

For each treatment BMP or structure at your facility, fill out a copy of the following table with the appropriate information (cut/paste additional tables, if necessary).

Structure:

Date of Implementation:

Discharge Point:

Area(s) Treated:

Pollutants Removed:

Maintenance Requirement(s):

Frequency:

INSERT DESCRIPTION OF ADDITIONAL BMPs HERE, IF APPLICABLE OR NECESSARY BASED ON CORRECTIVE ACTIONS

Section 4. Sampling Plan

Instructions (see S3.B.5. Sampling Plan pg. 20)

Describe your procedures for conducting analytical and visual monitoring specified by the ISWGP by completing the following section.

1. **Discharge Location(s).** Identify all points of *discharge* to surface water, *storm sewers*, or discrete *ground water* infiltration locations, such as dry wells or *detention* ponds. **INSERT TEXT HERE** or use Table Below.

Discharge ID	Common description	Latitude (optional)	Longitude (optional)	Discharge Type	Comments
A1 (example)	Drain by SW corner of shop	45°00'00"	124°00'00"	Surface Water	Storm drain connected to Blue Creek
INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE
INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE

2. Identify each sampling location by its unique identifying number such as A1, A2, etc. Include these sampling locations on site map. **INSERT TEXT HERE** or use Table Below

Note: When identifying sampling locations, follow these permit conditions:

- The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.
- The Permittee is not required to sample on-site discharges to ground (e.g., infiltration, etc.) or *sanitary sewer* discharges, unless specifically required by *Ecology* (Condition G12).
- The Permittee shall sample each distinct point of *discharge* off-site except as otherwise exempt from monitoring as a “substantially identical outfall” per S3.B.5.b. The Permittee is required to monitor only one of the “substantially identical outfalls” if two or more outfalls discharge substantially identical effluents (based on similar industrial activities and site conditions).
- The exception to sampling each point of *discharge* in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).

Discharge ID	Common description	Latitude (optional)	Longitude (optional)	Discharge Type	Comments
A1 (example)	Drain by SW corner of shop	45°00'00"	124°00'00"	Surface Water	Storm drain connected to Blue Creek
INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE
INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE	INSERT TEXT HERE

3. Substantially identical outfall exception (if applicable)

If you plan to use the substantially identical outfall exception for your discharge monitoring per Condition S4.B.2.c, include the following information here to substantiate your claim that these outfalls are substantially identical:

- Location of which discharge points the Permittee does not sample because the pollutant concentrations are substantially identical to a discharge point being sampled: **INSERT TEXT HERE**
- Description of general industrial activities conducted in the drainage area of each discharge point: **INSERT TEXT HERE**
- Description of the Best Management Practices conducted in the drainage area of each discharge point: **INSERT TEXT HERE**
- Description of the exposed materials located in the drainage area of each discharge point that are likely to be significant contributors of pollutants to stormwater discharges: **INSERT TEXT HERE**
- Description of the *impervious surfaces* in the drainage area that could affect the percolation of stormwater runoff into the ground (e.g., asphalt, crushed rock, grass, etc.): **INSERT TEXT HERE**
 - Definitions:
 - *Impervious*: A surface which cannot be easily penetrated. For instance, rain does not readily penetrate paved surfaces.
 - *Impervious surface*: A hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen

materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

- Describe the reasons why the you expect the discharge points to discharge substantially identical effluents (e.g., identical stormwater): [INSERT TEXT HERE](#)

4. **Staff Responsible for Sampling.** Identify the staff responsible for conducting *stormwater* sampling [INSERT TEXT HERE](#)
5. **Sample Collection and Handling.** Specify the procedures for sample collection and handling; and for sending samples to the laboratory [INSERT TEXT HERE](#)
6. **Submitting Sample Results to Ecology.** Specify the procedures for submitting Discharge Monitoring Reports (DMRs) to Ecology.

NOTE: The following excerpt from Permit Condition S9 may be retained to satisfy this requirement:

- The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by *Ecology*.
- The Permittee shall submit sampling results within 45 days of the end of each reporting period.
- The first reporting period shall begin on the effective date of permit coverage.
- Upon permit coverage, the Permittee shall ensure that DMRs are postmarked or received by *Ecology* by the DMR Due Dates below:

Reporting Dates and DMR Due Dates

Reporting Period	Months	DMR Due Date
1 st	January-March	May 15
2 nd	April-June	August 14
3 rd	July-Sept	November 14
4 th	October-December	February 14

- DMRs shall be submitted using *Ecology's* WWebDMR system or by mail to the following address:
Department of Ecology
Water Quality Program – Industrial Stormwater
PO Box 47696
Olympia, Washington 98504-7696
- Upon permit coverage, the Permittee shall submit a DMR each reporting period, whether or not the *facility* has discharged *stormwater* from the site.
- If discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter, the Permittee shall submit a DMR form indicating “no sample obtained”. If no discharge(s) occurred during the entire quarter or the discharges during

the quarter occurred outside normal working hours or during unsafe conditions, the Permittee shall submit a DMR indicating “no discharge”.

- If a Permittee has suspended sampling for a parameter due to consistent attainment, the Permittee shall submit a DMR and indicate that it has achieved Consistent Attainment for that parameter(s).

7. Sampling Parameters. Identify parameters for analysis, holding times and preservatives, laboratory quantitation levels, and analytical methods.

- a. Table 2 lists the parameters that apply to all facilities
- b. Table 3 lists the parameters that only apply to certain facilities (Delete or modify if not applicable to your facility).

Table 2. Benchmarks and Sampling Requirements Applicable to All Facilities

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level ^a	Minimum Sampling Frequency ^b
Turbidity	NTU	25	EPA 180.1 Meter	0.5	1/quarter
pH	Standard Units	Between 5.0 and 9.0	Meter/Paper ^c	±0.5	1/quarter
Oil Sheen	Yes/No	No Visible Oil Sheen	N/A	N/A	1/quarter
Copper, Total	µg/L	Western WA: 14 Eastern WA: 32	EPA 200.8	2.0	1/quarter
Zinc, Total	µg/L	117	EPA 200.8	2.5	1/quarter

^a The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from 40 CFR Part 136 is sufficient to produce measurable results in its effluent, it may use that method for analysis.

^b 1/quarter means 1 sample taken each quarter, year-round.

^c Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 SU.

Table 3. Additional Benchmarks and Sampling Requirements Applicable to Specific Industries
(Delete or modify if not applicable to your facility)

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level ^a	Minimum Sampling Frequency ^b
1. Chemical and Allied Products (28xx), Food and Kindred Products (20xx)					
BOD ₅	mg/L	30	EPA 405.1 or SM 5210B	2	1/quarter
Nitrate/Nitrite, as Nitrogen	mg/L	0.68	EPA 353.1	0.10	1/quarter
Phosphorus, Total	mg/L	2.0	EPA 365.1	0.10	1/quarter
2. Primary Metals(33xx), Metals Mining (10xx), Automobile Salvage and Scrap Recycling (5015 and 5093), Metals Fabricating (34xx)					

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level ^a	Minimum Sampling Frequency ^b
Lead, Total	µg/L	81.6	EPA 200.8	0.5	1/quarter
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1	1/quarter
3. Hazardous Waste Treatment, Storage and Disposal Facilities and Dangerous Waste Recyclers subject to the provisions of Resource Conservation and Recovery Act (RCRA) Subtitle C					
Chemical Oxygen Demand (COD)	mg/L	120	SM5220-D	10	1/quarter
Ammonia, Total, as N	mg/L	2.1	SM4500-NH3-GH	0.3	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter
Arsenic, Total	µg/L	150	EPA 200.8	0.5	1/quarter
Cadmium, Total	µg/L	2.1	EPA 200.8	0.25	1/quarter
Cyanide, Total	µg/L	22	SM 4500-CN I	10	1/quarter
Lead, Total	µg/L	81.6	EPA 200.8	0.5	1/quarter
Magnesium, Total	µg/L	64	EPA 200.7	80	1/quarter
Mercury, Total	µg/L	1.4	EPA 1631E	0.0005	1/quarter
Selenium, Total	µg/L	5.0	EPA 200.8	1.0	1/quarter
Silver, Total	µg/L	3.8	EPA 200.8	0.2	1/quarter
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1	1/quarter
4. Air Transportation ^c (45xx)					
Ammonia	mg/L	2.1	SM4500-NH3-GH	0.3	1/quarter
BOD ₅	mg/L	30	EPA 405.1 or SM 5210B	2	1/quarter
COD	mg/L	120	EPA 410.2	5	1/quarter
Nitrate/Nitrite, as N	mg/L	0.68	EPA 4500-NO3-E/F/H	0.10	1/quarter
5. Timber Product Industry (24xx), Paper and Allied Products (26xx)					
COD	mg/L	120	SM5220-D	10	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter

^a The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

^b 1/quarter means 1 sample taken each quarter, year-round.

^c For airports where a single permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these additional four parameters in those outfalls that collect *runoff* from areas where deicing activities occur (SIC 4512-4581).

Section 5. SWPPP Certification

Instructions:

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- The SWPPP Certification Form is available in ISWGP Appendix 3 (pg. 59) or Appendix D of this SWPPP template.
- Sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3, S8, and G2 of the Industrial Stormwater General Permit.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

SWPPP Appendices

Attach the following documentation to the SWPPP:

Appendix A – General Location Map

Appendix B – Site Map

Appendix C – Blank Worksheets for Development of the SWPPP

Appendix D – SWPPP Certification or Recertification Form (for Level 1, 2, or 3 Corrective Action(s))

Appendix E – Applicable Industry-Specific Source Control BMPs

Appendix F – Industrial Stormwater Monthly Inspection Report

Appendix C. Blank Worksheets for Development of the SWPPP

Note: Use these forms or create your own.

Pollution Prevention Team	Worksheet #1 Completed by: _____ Title: _____ Date: _____
Responsible Official: _____ Title: _____	
Team Leader: _____ Office Phone: _____	
Responsibilities:	

(1) _____ Title: _____	
Office phone _____ Cell phone _____	
Responsibilities:	

(2) _____ Title: _____	
Office phone _____ Cell phone _____	
Responsibilities:	

Worksheet #2

Completed by:

Title:

Date:

[illegible]

[illegible]

Potential Pollutant Source Identification	Worksheet #3
	Completed by: _____
	Title: _____
	Date: _____

Potential Pollutant Source Identification	Worksheet #3
	Completed by: _____
	Title: _____
	Date: _____

List all potential stormwater pollutants from materials handled, treated, or stored on-site.

[illegible]

Spill Log

Worksheet #4A

Completed by:

Title:

Date: _____

List all chemical and petroleum spills and leaks

[illegible]

Identify Areas Associated With Industrial Activity

Worksheet #5
Completed by: _____
Title: _____
Date: _____

List areas and activities, not included on Worksheets 2, 2A, and 3, which may be sources of pollution. Discuss the potential of these areas and activities as potential pollutant sources and identify any pollutant that may be generated by that activity...

[illegible]

BMP Identification		Worksheet #8 _____ Completed by: _____ Title: _____ Date: _____
Describe the BMPs that are needed for the facility to address existing and potential pollutant sources identified in Worksheets #3, 4, and 5.		
BMPs	Brief Description of Activities or Improvements	
Good Housekeeping		
Preventive Maintenance		
Spill Prevention and Emergency Cleanup		

BMPs	Brief Description of Activities or Improvements
------	---

Inspections	
Source / Operational Control BMPs	
Erosion and Sediment Control BMPs	

Additional BMP Identification		Completed by: _____ Title: _____ Date: _____	
Describe any treatment and innovative BMPs that are required to address existing and potential pollutant sources identified in Worksheet 3, 4, and 5. These are BMPs needed to prevent the discharge of significant amounts of pollutants despite implementation of operational and source control BMPs.			
BMPs	Brief Description of Activities or Improvements		
Treatment BMPs			
Emerging technologies Flow Control BMPs			

		Completed by: _____ Title: _____ Date: _____	
Develop a plan for implementing each BMP. Describe the steps necessary to implement the BMP (i.e., any construction or design), the schedule for completing those steps (list dates) and the person(s) responsible for implementation.			
BMPs	Description of Action(s) Required for Implementation	Schedule Milestone and Completion Date(s)	Person Responsible for Action
Good Housekeeping	1.		
	2.		
	3.		
Preventive Maintenance	1.		
	2.		
	3.		
	4.		
Spill Prevention and Emergency Cleanup	1.		
	2.		
	3.		
Inspections	1.		
	2.		
	3.		

BMPs	Description of Action(s) Required for Implementation	Schedule Milestone and Completion Date(s)	Person Responsible for Action
------	--	---	-------------------------------

Source Control BMPs Operational Control BMPs	1.		
	2.		
	3		
	4.		
	5.		
	6.		
	7.		
	8.		
Erosion and Sediment Control	1.		
	2.		
	3.		
	4.		
Treatment BMPs	1.		
	2.		
	3.		
	4.		
Emerging technologies	1.		
	2.		
Flow Control BMPs	3.		
	4.		

		Completed by: _____	
		Title: _____	
		Date: _____	
Describe the annual training of employees on the SWPPP, addressing spill response, good housekeeping, and material management practices.			
Training Topics 1.) LINE WORKERS	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
Spill Prevention and Response			
Good Housekeeping			
Material Management Practices			
2.) P2 TEAM:			
SWPPP Implementation			
Monitoring Procedures			

Appendix D. SWPPP Certification Form

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐ Yes ☐ No

If **Yes**:

- Type of Corrective Action?: ☐ Level 1 ☐ Level 2 ☐ Level 3
- Date SWPPP update/revision completed:_____.

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Operator's Printed Name *

Title

Operator's Signature *

Date

* Federal regulations require this document to be signed as follows:

For a corporation, by a principal executive officer of at least the level of vice president;
For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

This document shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Changes to authorization. If an authorization under number 2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of number 2 above shall be submitted to Ecology prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

Appendix E. List of Applicable Industry-Specific Source Control BMPs

Mandatory BMPs:

Condition S3. of the Industrial Stormwater General Permit requires SWPPP to include all Operational and Structural Source Control BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents as mandatory. The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

Cut and paste applicable BMPs from Appendix E into the Sections 3 of this template.

Operational Source Control BMPs for Building, Repair, and Maintenance of Boats and Ships:

- Clean regularly all accessible work, service and storage areas to remove debris, spent sandblasting material, and any other potential stormwater pollutants.
- Sweep rather than hose debris on the dock. If hosing is unavoidable the hose water must be collected and conveyed to treatment.
- Collect spent abrasives regularly and store under cover to await proper disposal.
- Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly.
- Drain oil filters before disposal or recycling.
- Immediately repair or replace leaking connections, valves, pipes, hoses and equipment that causes the contamination of stormwater.
- Use drip pans, drop cloths, tarpaulins or other protective devices in all paint mixing and solvent operations unless carried out in impervious contained and covered areas.
- Convey sanitary sewage to pump-out stations, portable on-site pump-outs, or commercial mobile pump-out facilities or other appropriate onshore facilities.
- Maintain automatic bilge pumps in a manner that will prevent waste material from being pumped automatically into surface water.
- Prohibit uncontained spray painting, blasting or sanding activities over open water.
- Do not dump or pour waste materials down floor drains, sinks, or outdoor storm drain inlets that discharge to surface water. Plug floor drains that are connected to storm drains or to surface water. If necessary, install a sump that is pumped regularly.
- Prohibit outside spray painting, blasting or sanding activities during windy conditions that render containment ineffective.
- Do not burn paint and/or use spray guns on topsides or above decks.
- Immediately clean up any spillage on dock, boat or ship deck areas and dispose of the wastes properly.
- In the event of an accidental discharge of oil or hazardous material into waters of the state or onto land with a potential for entry into state waters, immediately notify the yard, port, or marina owner or manager, the Department of Ecology, and the National Response Center at

1-800-424-8802 (24-hour). If the spill can reach or has reached marine water, call the U.S. Coast Guard at (206) 217-6232.

Operational Source Control BMPs for Commercial Animal Handling Areas:

- Regularly sweep and clean animal keeping areas to collect and properly dispose of droppings, uneaten food, and other potential stormwater contaminants.
- Do not hose down to storm drains or to receiving water those areas that contain potential stormwater contaminants.
- Do not allow any washwaters to be discharged to storm drains or to receiving water without proper treatment.
- If animals are kept in unpaved and uncovered areas, the ground must either have vegetative cover or some other type of ground cover such as mulch.
- If animals are not leashed or in cages, the area where animals are kept must be surrounded by a fence or other means that prevents animals from moving away from the controlled area where BMPs are used.

Operational Source Control BMPs for Commercial Composting:

- Ensure that the compost feedstocks do not contain dangerous wastes, regulated under Chapter 173-303 WAC or hazardous products of a similar nature, or solid wastes that are not beneficial to the composting process. Employees must be trained to screen these materials in incoming wastes.
- Contact other federal, state, and local agencies with environmental or zoning authority for applicable permit and regulatory information. Local health departments are responsible for issuing solid waste handling permits for commercial compost facilities.
- Apply for coverage under the General Permit to Discharge Stormwater Associated with Industrial Activities, if the facility discharges stormwater to surface water or a municipal stormwater system. If all stormwater from the facility infiltrates into the surrounding area, the General Permit is not required.
- Discharge of compost leachate, stormwater that has contacted compost, or stormwater comingled with leachate is prohibited.
- Develop a plan of operations as outlined in the Compost Facility Resource Handbook, Publication #97-502.
- Store finished compost in a manner to prevent contamination of stormwater.

Operational Source Control BMPs for Commercial Printing Operations:

- Discharge process wastewaters to a sanitary sewer, if approved by the local sewer authority, or to an approved process wastewater treatment system.
- Do not discharge process wastes or wastewaters into storm drains or surface water.
- Determine whether any of these wastes qualify for regulation as dangerous wastes and dispose of them accordingly.

Operational Source Control BMPs for Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots:

- Sprinkle or wet down soil or dust with water as long as it does not result in a wastewater discharge.
- Use only local and/or state government approved dust suppressant chemicals such as those listed in Ecology Publication #96-433, “Techniques for Dust Prevention and Suppression.”
- Avoid excessive and repeated applications of dust suppressant chemicals. Time the application of dust suppressants to avoid or minimize their wash-off by rainfall or human activity such as irrigation.
- Apply stormwater containment to prevent the conveyance of stormwater TSS into storm drains or receiving waters.
- The use of motor oil for dust control is prohibited. Care should be taken when using lignin derivatives and other high BOD chemicals in excavations or areas easily accessible to surface water or ground water.
- Consult with the Ecology Regional Office in your area on discharge permit requirements if the dust suppression process results in a wastewater discharge to the ground, ground water, storm drain, or surface water.

Operational Source Control BMPs for Dust Control at Manufacturing Areas:

- Clean, as needed, powder material handling equipment and vehicles that can be sources of stormwater pollutants, to remove accumulated dust and residue.
- Regularly sweep dust accumulation areas that can contaminate stormwater. Sweeping should be conducted using vacuum filter equipment to minimize dust generation and to ensure optimal dust removal.

Operational Source Control BMPs for Fueling At Dedicated Stations:

- Prepare an emergency spill response and cleanup plan (per BMPs for Spills of Oil and Hazardous Substances) and have designated trained person(s) available either on site or on call at all times to promptly and properly implement that plan and immediately cleanup all spills. Keep suitable cleanup materials, such as dry adsorbent materials, on site to allow prompt cleanup of a spill.
- Train employees on the proper use of fuel dispensers. Post signs in accordance with the Uniform Fire Code (UFC). Post “No Topping Off” signs (topping off gas tanks causes spillage and vents gas fumes to the air). Make sure that the automatic shutoff on the fuel nozzle is functioning properly.
- The person conducting the fuel transfer must be present at the fueling pump during fuel transfer, particularly at unattended or self-serve stations.
- Keep drained oil filters in a suitable container or drum.

Operational Source Control BMPs for Illicit Connections to Storm Drains:

- Eliminate unpermitted wastewater discharges to storm drains, ground water, or surface water; and,
- Convey unpermitted discharges to a sanitary sewer if allowed by the local sewer authority, or to other approved treatment; and,
- Obtain appropriate permits for these discharges.

Operational Source Control BMPs for Landscaping and Lawn/Vegetation Management:

Landscaping:

- Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas.
- Do not dispose of collected vegetation into waterways or storm drainage systems.

Pesticides:

- Develop and implement an Integrated Pest Management (IPM) plan and use pesticides only as a last resort.

An IPM program might consist of the following steps:

Step 1: Correctly identify problem pests and understand their life cycle

Step 2: Establish tolerance thresholds for pests.

Step 3: Monitor to detect and prevent pest problems.

Step 4: Modify the maintenance program to promote healthy plants and discourage pests.

Step 5: Use cultural, physical, mechanical, or biological controls first if pests exceed the tolerance thresholds.

Step 6: Evaluate and record the effectiveness of the control and modify maintenance practices to support lawn or landscape recovery and prevent recurrence.

- Implement a pesticide-use plan and include at a minimum: a list of selected pesticides and their specific uses; brands, formulations, application methods and quantities to be used; equipment use and maintenance procedures; safety, storage, and disposal methods; and monitoring, record keeping, and public notice procedures. All procedures shall conform to the requirements of Chapter 17.21 RCW and Chapter 16-228 WAC (Appendix IV-D R.7).
- Choose the least toxic pesticide available that is capable of reducing the infestation to acceptable levels. The pesticide should readily degrade in the environment and/or have properties that strongly bind it to the soil. Any pest control used should be conducted at the life stage when the pest is most vulnerable. For example, if it is necessary to use a *Bacillus thuringiensis* application to control tent caterpillars, it must be applied before the caterpillars cocoon or it will be ineffective. Any method used should be site-specific and not used wholesale over a wide area.
- Apply the pesticide according to label directions. Under no conditions shall pesticides be applied in quantities that exceed manufacturer's instructions.
- Mix the pesticides and clean the application equipment in an area where accidental spills will not enter surface or ground waters, and will not contaminate the soil.

- Store pesticides in enclosed areas or in covered impervious containment. Ensure that pesticide contaminated stormwater or spills/leaks of pesticides are not discharged to storm drains. Do not hose down the paved areas to a storm drain or conveyance ditch. Store and maintain appropriate spill cleanup materials in a location known to all near the storage area.
- Clean up any spilled pesticides and ensure that the pesticide contaminated waste materials are kept in designated covered and contained areas.
- The pesticide application equipment must be capable of immediate shutoff in the event of an emergency.
- Do not spray pesticides within 100 feet of open waters including wetlands, ponds, and streams, sloughs and any drainage ditch or channel that leads to open water except when approved by Ecology or the local jurisdiction. All sensitive areas including wells, creeks and wetlands must be flagged prior to spraying.
- As required by the local government or by Ecology, complete public posting of the area to be sprayed prior to the application.
- Spray applications should only be conducted during weather conditions as specified in the label direction and applicable local and state regulations. Do not apply during rain or immediately before expected rain.

Vegetation Management:

- Use at least an eight-inch "topsoil" layer with at least 8 percent organic matter to provide a sufficient vegetation-growing medium. Amending existing landscapes and turf systems by increasing the percent organic matter and depth of topsoil can substantially improve the permeability of the soil, the disease and drought resistance of the vegetation, and reduce fertilizer demand. This reduces the demand for fertilizers, herbicides, and pesticides. Organic matter is the least water-soluble form of nutrients that can be added to the soil. Composted organic matter generally releases only between 2 and 10 percent of its total nitrogen annually, and this release corresponds closely to the plant growth cycle. If natural plant debris and mulch are returned to the soil, this system can continue recycling nutrients indefinitely.
- Select the appropriate turfgrass mixture for your climate and soil type. Certain tall fescues and rye grasses resist insect attack because the symbiotic endophytic fungi found naturally in their tissues repel or kill common leaf and stem-eating lawn insects. They do not, however, repel root-feeding lawn pests such as Crane Fly larvae, and are toxic to ruminants such as cattle and sheep. The fungus causes no known adverse effects to the host plant or to humans. Endophytic grasses are commercially available and can be used in areas such as parks or golf courses where grazing does not occur. The local Cooperative Extension office can offer advice on which types of grass are best suited to the area and soil type.
- Use the following seeding and planting BMPs, or equivalent BMPs to obtain information on grass mixtures, temporary and permanent seeding procedures, maintenance of a recently planted area, and fertilizer application rates: Temporary Seeding, Mulching and Matting, Clear Plastic Covering, Permanent Seeding and Planting, and Sodding as described in Volume II).
- Selection of desired plant species can be made by adjusting the soil properties of the subject site. For example, a constructed wetland can be designed to resist the invasion of reed canary grass by layering specific strata of organic matters (e.g., compost forest product residuals)

and creating a mildly acidic pH and carbon-rich soil medium. Consult a soil restoration specialist for site-specific conditions.

- Aerate lawns regularly in areas of heavy use where the soil tends to become compacted. Aeration should be conducted while the grasses in the lawn are growing most vigorously. Remove layers of thatch greater than ¾-inch deep.
- Mowing is a stress-creating activity for turfgrass. When grass is mowed too short its productivity is decreased and there is less growth of roots and rhizomes. The turf becomes less tolerant of environmental stresses, more disease prone and more reliant on outside means such as pesticides, fertilizers and irrigation to remain healthy. Set the mowing height at the highest acceptable level and mow at times and intervals designed to minimize stress on the turf. Generally mowing only 1/3 of the grass blade height will prevent stressing the turf.

Irrigation:

- The depth from which a plant normally extracts water depends on the rooting depth of the plant. Appropriately irrigated lawn grasses normally root in the top 6 to 12 inches of soil; lawns irrigated on a daily basis often root only in the top 1 inch of soil. Improper irrigation can encourage pest problems, leach nutrients, and make a lawn completely dependent on artificial watering. The amount of water applied depends on the normal rooting depth of the turfgrass species used, the available water holding capacity of the soil, and the efficiency of the irrigation system. Consult with the local water utility, Conservation District, or Cooperative Extension office to help determine optimum irrigation practices.

Fertilizer Management:

- Turfgrass is most responsive to nitrogen fertilization, followed by potassium and phosphorus. Fertilization needs vary by site depending on plant, soil and climatic conditions. Evaluation of soil nutrient levels through regular testing ensures the best possible efficiency and economy of fertilization. For details on soils testing, contact the local Conservation District or Cooperative Extension Service.
- Fertilizers should be applied in amounts appropriate for the target vegetation and at the time of year that minimizes losses to surface and ground waters. Do not fertilize during a drought or when the soil is dry. Alternatively, do not apply fertilizers within three days prior to predicted rainfall. The longer the period between fertilizer application and either rainfall or irrigation, the less fertilizer runoff occurs.
- Use slow release fertilizers such as methylene urea, IDBU, or resin coated fertilizers when appropriate, generally in the spring. Use of slow release fertilizers is especially important in areas with sandy or gravelly soils.
- Time the fertilizer application to periods of maximum plant uptake. Generally fall and spring applications are recommended, although WSU turf specialists recommend four fertilizer applications per year.
- Properly trained persons should apply all fertilizers. At commercial and industrial facilities fertilizers should not be applied to grass swales, filter strips, or buffer areas that drain to sensitive water bodies unless approved by the local jurisdiction.

Operational Source Control BMPs for Loading and Unloading Areas for Liquid or Solid Material:

All Loading/Unloading Areas:

- A significant amount of debris can accumulate at outside, uncovered loading/unloading areas. Sweep these surfaces frequently to remove material that could otherwise be washed off by stormwater. Sweep outside areas that are covered for a period of time by containers, logs, or other material after the areas are cleared.
- Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels and filler nozzles. Drip pans shall always be used when making and breaking connections (see Figure 2.2). Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.

Tanker Truck and Rail Transfer Areas to Above/Below-ground Storage Tanks:

- To minimize the risk of accidental spillage, prepare an "Operations Plan" that describes procedures for loading/unloading. Train the employees, especially fork lift operators, in its execution and post it or otherwise have it readily available to employees.
- Report spills of reportable quantities to Ecology (refer to Section 2.1 for telephone numbers of Ecology Regional Offices).
- Prepare and implement an Emergency Spill Cleanup Plan for the facility (BMP Spills of Oil and Hazardous Substances) which includes the following BMPs:
 - Ensure the clean up of liquid/solid spills in the loading/ unloading area immediately, if a significant spill occurs, and, upon completion of the loading/unloading activity, or, at the end of the working day.
 - Retain and maintain an appropriate oil spill cleanup kit on-site for rapid cleanup of material spills. (See BMP Spills of Oil and Hazardous Substances).
 - Ensure that an employee trained in spill containment and cleanup is present during loading/unloading.

Rail Transfer Areas to Above/below-ground Storage Tanks:

- Install a drip pan system as illustrated (see Figure 2.3) within the rails to collect spills/leaks from tank cars and hose connections, hose reels, and filler nozzles.

Loading/Unloading from/to Marine Vessels:

- Facilities and procedures for the loading or unloading of petroleum products must comply with Coast Guard requirements.

Transfer of Small Quantities from Tanks and Containers:

- Refer to BMPs Storage of Liquids in Permanent Above-Ground Tanks, and Storage of Liquid, Food Waste, or Dangerous Waste Containers, for requirements on the transfer of small quantities from tanks and containers, respectively.

Operational Source Control BMPs for Log Sorting and Handling:

- Required operational source control BMPs are presented in detail in Ecology's Guidance Document: "Industrial Stormwater General Permit Implementation Manual for Log Yards"

Operational Source Control BMPs for Maintenance and Repair of Vehicles and Equipment:

- Inspect for leaks all incoming vehicles, parts, and equipment stored temporarily outside.
- Use drip pans or containers under parts or vehicles that drip or that are likely to drip liquids, such as during dismantling of liquid containing parts or removal or transfer of liquids.
- Remove batteries and liquids from vehicles and equipment in designated areas designed to prevent stormwater contamination. Store cracked batteries in a covered non-leaking secondary containment system.
- Empty oil and fuel filters before disposal. Provide for proper disposal of waste oil and fuel.
- Do not pour/convey washwater, liquid waste, or other pollutant into storm drains or to surface water. Check with the local sanitary sewer authority for approval to convey to a sanitary sewer.
- Do not connect maintenance and repair shop floor drains to storm drains or to surface water. To allow for snowmelt during the winter a drainage trench with a sump for particulate collection can be installed and used only for draining the snowmelt and not for discharging any vehicular or shop pollutants.

Operational Source Control BMPs for Maintenance of Public and Private Utility Corridors and Facilities:

- Operational Source Control BMPs for Landscaping and Lawn/Vegetation Management and Pesticides.
- When water or sediments are removed from electric transformer vaults, determine whether contaminants might be present before disposing of the water and sediments. This includes inspecting for the presence of oil or sheen, and determining from records or testing if the transformers contain PCBs. If records or tests indicate that the sediment or water are contaminated above applicable levels, manage these media in accordance with applicable federal and state regulations, including the federal PCB rules (40 CFR 761) and the state MTCA cleanup regulations (Chapter 173-340 WAC). Water removed from the vaults can be discharged in accordance with the federal 40 CFR 761.79, and state regulations (Chapter 173-201A WAC and Chapter 173-200 WAC), or via the sanitary sewer if the requirements, including applicable permits, for such a discharge are met. (See also Appendix IV-D R.1 and R.3).
- Within utility corridors, consider preparing maintenance procedures and an implementation schedule that provides for a vegetative, gravel, or equivalent cover that minimizes bare or thinly vegetated ground surfaces within the corridor, to prevent the erosion of soil.
- Provide maintenance practices to prevent stormwater from accumulating and draining across and/or onto roadways. Stormwater should be conveyed through roadside ditches and culverts. The road should be crowned, outsloped, water barred or otherwise left in a condition not conducive to erosion. Appropriately maintaining grassy roadside ditches discharging to

surface waters is an effective way of removing some pollutants associated with sediments carried by stormwater.

- Maintain ditches and culverts at an appropriate frequency to ensure that plugging and flooding across the roadbed, with resulting overflow erosion, does not occur.
- Operational Source Control BMPs for the Storage of Waste Materials That can Contaminate Stormwater.

Operational Source Control BMPs for Maintenance of Roadside Ditches:

- Inspect roadside ditches regularly, as needed, to identify sediment accumulations and localized erosion.
- Clean ditches on a regular basis, as needed. Ditches should be kept free of rubbish and debris.
- Vegetation in ditches often prevents erosion and cleanses runoff waters. Remove vegetation only when flow is blocked or excess sediments have accumulated. Conduct ditch maintenance (seeding, fertilizer application, harvesting) in late spring and/or early fall, where possible. This allows vegetative cover to be re-established by the next wet season thereby minimizing erosion of the ditch as well as making the ditch effective as a biofilter.
- In the area between the edge of the pavement and the bottom of the ditch, commonly known as the “bare earth zone,” use grass vegetation, wherever possible. Vegetation should be established from the edge of the pavement if possible, or at least from the top of the slope of the ditch.
- Diversion ditches on top of cut slopes that are constructed to prevent slope erosion by intercepting surface drainage must be maintained to retain their diversion shape and capability.
- Ditch cleanings are not to be left on the roadway surfaces. Sweep dirt and debris remaining on the pavement at the completion of ditch cleaning operations.
- Roadside ditch cleanings, not contaminated by spills or other releases and not associated with a stormwater treatment system such as a bioswale, may be screened to remove litter and separated into soil and vegetative matter (leaves, grass, needles, branches, etc.). The soil fraction may be handled as ‘clean soils’ and the vegetative matter can be composted or disposed of in a municipal waste landfill.
- Roadside ditch cleanings contaminated by spills or other releases known or suspected to contain dangerous waste must be handled following the Dangerous Waste Regulations (Chapter 173-303 WAC) unless testing determines it is not dangerous waste.
- Examine culverts on a regular basis for scour or sedimentation at the inlet and outlet, and repair as necessary. Give priority to those culverts conveying perennial and/or salmon-bearing streams and culverts near streams in areas of high sediment load, such as those near subdivisions during construction.

Operational Source Control BMPs for Maintenance of Stormwater Drainage and Treatment Systems:

- Inspect and clean treatment BMPs, conveyance systems, and catch basins as needed, and determine whether improvements in O & M are needed.

- Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of clean-out gates, catch basin lids, and rock in emergency spillways.
- Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.
- Regularly remove debris and sludge from BMPs used for peak-rate control, treatment, etc. and discharge to a sanitary sewer if approved by the sewer authority, or truck to a local or state government approved disposal site.
- Clean catch basins when the depth of deposits reaches 60 percent of the sump depth as measured from the bottom of basin to the invert of the lowest pipe into or out of the basin. However, in no case should there be less than six inches clearance from the debris surface to the invert of the lowest pipe. Some catch basins (for example, WSDOT Type 1L basins) may have as little as 12 inches sediment storage below the invert. These catch basins will need more frequent inspection and cleaning to prevent scouring. Where these catch basins are part of a stormwater collection and treatment system, the system owner/operator may choose to concentrate maintenance efforts on downstream control devices as part of a systems approach.
- Clean woody debris in a catch basin as frequently as needed to ensure proper operation of the catch basin.
- Post warning signs; “Dump No Waste - Drains to Ground Water,” “Streams,” “Lakes,” or emboss on or adjacent to all storm drain inlets where practical.
- Disposal of sediments and liquids from the catch basins must comply with “Recommendations for Management of Street Wastes” described in Appendix IV-G of this volume.
- Operational Source Control BMPs for Soil Erosion and Sediment Control at Industrial Sites, Storage of Liquid, Food Waste, or Dangerous Waste Containers, Spills of Oil and Hazardous Substances, Illicit Connections to Storm Drains, Urban Streets.

Operational Source Control BMPs for Manufacturing Activities - Outside:

- Alter the activity by eliminating or minimizing the contamination of stormwater.
- Enclose the activity (see Figure 2.6): If possible, enclose the manufacturing activity in a building.
- Cover the activity and connect floor drains to a sanitary sewer, if approved by the local sewer authority. Berm or slope the floor as needed to prevent drainage of pollutants to outside areas. (Figure 2.7)
- Isolate and segregate pollutants as feasible. Convey the segregated pollutants to a sanitary sewer, process treatment or a dead-end sump depending on available methods and applicable permit requirements.

Operational Source Control BMPs for Mobile Fueling of Vehicles and Heavy Equipment:

- Ensure that all mobile fueling operations are approved by the local fire department and comply with local and Washington State fire codes.
- In fueling locations that are in close proximity to sensitive aquifers, designated wetlands, wetland buffers, or other waters of the State, approval by local jurisdictions is necessary to ensure compliance with additional local requirements.

- Ensure the compliance with all 49 CFR 178 requirements for DOT 406 cargo tanker. Documentation from a Department of Transportation (DOT) Registered Inspector shall be proof of compliance.
- Ensure the presence and the constant observation/monitoring of the driver/operator at the fuel transfer location at all times during fuel transfer and ensure that the following procedures are implemented at the fuel transfer locations:
 - Locating the point of fueling at least 25 feet from the nearest storm drain or inside an impervious containment with a volumetric holding capacity equal to or greater than 110 percent of the fueling tank volume, or covering the storm drain to ensure no inflow of spilled or leaked fuel. Storm drains that convey the inflow to a spill control separator approved by the local jurisdiction and the fire department need not be covered. Potential spill/leak conveyance surfaces must be impervious and in good repair.
 - Placement of a drip pan, or an absorbent pad under each fueling location prior to and during all dispensing operations. The pan (must be liquid tight) and the absorbent pad must have a capacity of 5 gallons. Spills retained in the drip pan or the pad need not be reported.
 - The handling and operation of fuel transfer hoses and nozzle, drip pan(s), and absorbent pads as needed to prevent spills/leaks of fuel from reaching the ground, storm drains, and receiving waters.
 - Not extending the fueling hoses across a traffic lane without fluorescent traffic cones, or equivalent devices, conspicuously placed so that all traffic is blocked from crossing the fuel hose.
 - Removing the fill nozzle and cessation of filling when the automatic shut-off valve engages. Do not allow automatic shutoff fueling nozzles to be locked in the open position.
 - Not “topping off” the fuel receiving equipment
- Provide the driver/operator of the fueling vehicle with:
 - Adequate flashlights or other mobile lighting to view fill openings with poor accessibility. Consult with local fire department for additional lighting requirements.
 - Two-way communication with his/her home base.
- Train the driver/operator annually in spill prevention and cleanup measures and emergency procedures. Make all employees aware of the significant liability associated with fuel spills.
- The fueling operating procedures should be properly signed and dated by the responsible manager, distributed to the operators, retained in the organization files, and made available in the event an authorized government agency requests a review.
- Ensure that the local fire department (911) and the appropriate regional office of the Department of Ecology are immediately notified in the event of any spill entering the surface or ground waters. Establish a “call down list” to ensure the rapid and proper notification of management and government officials should any significant amount of product be lost off-site. Keep the list in a protected but readily accessible location in the mobile fueling truck. The “call down list” should also pre-identify spill response contractors available in the area to ensure the rapid removal of significant product spillage into the environment.
- Maintain a minimum of the following spill clean-up materials in all fueling vehicles, that are readily available for use:
 - Non-water absorbents capable of absorbing 15 gallons of diesel fuel;
 - A storm drain plug or cover kit;

- A non-water absorbent containment boom of a minimum 10 feet in length with a 12-gallon absorbent capacity;
- A non-metallic shovel; and,
- Two, five-gallon buckets with lids.
- Use automatic shutoff nozzles for dispensing the fuel. Replace automatic shut-off nozzles as recommended by the manufacturer.
- Maintain and replace equipment on fueling vehicles, particularly hoses and nozzles, at established intervals to prevent failures.

Operational Source Control BMPs for Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

- Train employees in the careful application of paints, finishes, and coatings to reduce misuse and over spray. Use ground or drop cloths underneath outdoor painting, scraping, sandblasting work, and properly clean and temporarily store collected debris daily.
- Do not conduct spraying, blasting, or sanding activities over open water or where wind may blow paint into water.
- Wipe up spills with rags and other absorbent materials immediately. Do not hose down the area to a storm drain or receiving water or conveyance ditch to receiving water.
- On marine dock areas sweep rather than hose down debris. Collect any hose water generated and convey to appropriate treatment and disposal.
- Use a storm drain cover, filter fabric, or similarly effective runoff control device if dust, grit, washwater, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the workday. Collect contaminated runoff and solids and properly dispose of such wastes before removing the containment device(s) at the end of the workday.
- Use a ground cloth, pail, drum, drip pan, tarpaulin, or other protective device for activities such as paint mixing and tool cleaning outside or where spills can contaminate stormwater.
- Properly dispose of all wastes and prevent all uncontrolled releases to the air, ground or water.
- Clean brushes and tools covered with non-water-based paints, finishes, or other materials in a manner that allows collection of used solvents (e.g., paint thinner, turpentine, xylol, etc.) for recycling or proper disposal.
- Store toxic materials under cover (tarp, etc.) during precipitation events and when not in use to prevent contact with stormwater.

Operational Source Control BMPs for Parking and Storage of Vehicles and Equipment:

- If washing of a parking lot is conducted, discharge the washwater to a sanitary sewer, if allowed by the local sewer authority, or other approved wastewater treatment system, or collect it for off-site disposal.
- Do not hose down the area to a storm drain or to a receiving water. Sweep parking lots, storage areas, and driveways, regularly to collect dirt, waste, and debris.

Operational Source Control BMPs for Railroad Yards:

- Implement all required BMPs depending on the pollutant generating activities/sources at a railroad yard facility.
- Do not allow discharge to outside areas from toilets while a train is in transit. Pumpout facilities should be used to service these units.
- Use drip pans at hose/pipe connections during liquid transfer and other leak-prone areas.
- During maintenance do not discard debris or waste liquids along the tracks or in railroad yards.

Operational Source Control BMPs for Recyclers and Scrap Yards:

For facilities subject to Ecology's Industrial Stormwater General Permit refer to BMP Guidance Document "Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities," for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

Operational Source Control BMPs for Roof/Building Drains at Manufacturing and Commercial Buildings:

- If leachates and/or emissions from buildings are suspected sources of stormwater pollutants, then sample and analyze the stormwater draining from the building.
- If a roof/building stormwater pollutant source is identified, implement appropriate source control measures such as air pollution control equipment, selection of materials, painting galvanized surfaces, operational changes, material recycle, process changes, etc.

Operational Source Control BMPs for Soil Erosion and Sediment Control at Industrial Sites:

- Cover Practice Options:
 - Vegetative cover such as grass, trees, shrubs, on erodible soil areas; or,
 - Covering with mats such as clear plastic, jute, synthetic fiber; and/or,
 - Preservation of natural vegetation including grass, trees, shrubs, and vines,
- Structural Practice Options:
 - Vegetated swale, dike, silt fence, check dam, gravel filter berm, sedimentation basin, and proper grading.

Operational Source Control BMPs for Spills of Oil and Hazardous Substances:

- Prepare an Emergency Spill Control Plan (SCP), which includes:
 - A description of the facility including the owner's name and address;
 - The nature of the activity at the facility;
 - The general types of chemicals used or stored at the facility;
 - A site plan showing the location of storage areas for chemicals, the locations of storm drains, the areas draining to them, and the location and description of any devices to stop spills from leaving the site such as positive control valves;

- Cleanup procedures;
- Notification procedures to be used in the event of a spill, such as notifying key personnel. Agencies such as Ecology, local fire department, Washington State Patrol, and the local Sewer Authority, shall be notified;
- The name of the designated person with overall spill cleanup and notification responsibility;
- Train key personnel in the implementation of the Emergency SCP. Prepare a summary of the plan and post it at appropriate points in the building, identifying the spill cleanup coordinators, location of cleanup kits, and phone numbers of regulatory agencies to be contacted in the event of a spill;
- Update the SCP regularly;
- Immediately notify Ecology and the local Sewer Authority if a spill may reach sanitary or storm sewers, ground water, or surface water, in accordance with federal and Ecology spill reporting requirements;
- Immediately clean up spills. Do not use emulsifiers for cleanup unless an appropriate disposal method for the resulting oily wastewater is implemented. Absorbent material shall not be washed down a floor drain or storm sewer; and,
- Locate emergency spill containment and cleanup kit(s) in high potential spill areas. The contents of the kit shall be appropriate for the type and quantities of chemical liquids stored at the facility.

Operational Source Control BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

- Place tight-fitting lids on all containers.
- Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.
- Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.
- Businesses accumulating Dangerous Wastes that do not contain free liquids need only to store these wastes in a sloped designated area with the containers elevated or otherwise protected from storm water runoff.
- Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use.
- If the material is a Dangerous Waste, the business owner must comply with any additional Ecology requirements as required.
- Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code.
- Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Replace or repair leaking garbage dumpsters.
- Drain dumpsters and/or dumpster pads to sanitary sewer. Keep dumpster lids closed. Install waterproof liners.

Operational Source Control BMPs for Storage of Liquids in Permanent Above-ground Tanks:

- Inspect the tank containment areas regularly to identify problem components such as fittings, pipe connections, and valves, for leaks/spills, cracks, corrosion, etc.
- Place adequately sized drip pans beneath all mounted taps and drip/spill locations during filling/ unloading of tanks. Valved drain tubing may be needed in mounted drip pans.
- Sweep and clean the tank storage area regularly, if paved.
- Replace or repair tanks that are leaking, corroded, or otherwise deteriorating.
- All installations shall comply with the Uniform Fire Code and the National Electric Code

Operational Source Control BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

- Do not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain or to a receiving water.

Operational Source Control BMPs for Washing and Steam Cleaning Vehicles/Equipment/Building Structures:

- Conduct vehicle/equipment washing in one of the following locations:
 - At a commercial washing facility in which the washing occurs in an enclosure and drains to the sanitary sewer, or
 - In a building constructed specifically for washing of vehicles and equipment, which drains to a sanitary sewer.
- Conduct outside washing operation in a designated wash area with the following features:
 - In a paved area, constructed as a spill containment pad to prevent the run-on of stormwater from adjacent areas. Slope the spill containment area so that washwater is collected in a containment pad drain system with perimeter drains, trench drains or catchment drains. Size the containment pad to extend out a minimum of four feet on all sides of the vehicles and/or equipment being washed.
 - Convey the washwater to a sump (like a grit separator) and then to a sanitary sewer (if allowed by the local Sewer Authority), or other appropriate wastewater treatment or recycle system. An NPDES permit may be required for any washwater discharge to a storm drain or receiving water after treatment. Contact the Ecology regional office for NPDES Permit requirements.
 - The containment sump must have a positive control outlet valve for spill control with live containment volume, and oil/water separation. Size the minimum live storage volume to contain the maximum expected daily washwater flow plus the sludge storage volume below the outlet pipe. The outlet valve will be shut during the washing cycle to collect the washwater in the sump. The valve should remain shut for at least two hours following the washing operation to allow the oil and solids to separate before discharge to a sanitary sewer.
 - The inlet valve in the discharge pipe should be closed when washing is not occurring, thereby preventing the entry of uncontaminated stormwater into the pretreatment/ treatment system. The stormwater can then drain into the conveyance/discharge system outside of the wash pad (essentially bypasses the washwater treatment/conveyance

system). Post signs to inform people of the operation and purpose of the valve. Clean the concrete pad thoroughly until there is no foam or visible sheen in the washwater prior to closing the inlet valve and allowing uncontaminated stormwater to overflow and drain off the pad.

- Collect the washwater from building structures and convey it to appropriate treatment such as a sanitary sewer system if it contains oils, soaps, or detergents, where feasible. If the washwater does not contain oils, soaps, or detergents then it could drain to soils that have sufficient natural attenuation capacity for dust and sediment.

Operational Source Control BMPs for Wood Treatment Areas:

- Dedicate equipment that is used for treatment activities to prevent the tracking of treatment chemicals to other areas on the site.
- Eliminate non-process traffic on the drip pad. Scrub down nondedicated lift trucks on the drip pad.
- Immediately remove and properly dispose of soils with visible surface contamination (green soil) to prevent the spread of chemicals to ground water and/or surface water via stormwater runoff.
- If any wood is observed to be contributing chemicals to the environment in the treated wood storage area, relocate it on a concrete chemical containment structure until the surface is clean and until it is drip free and surface dry.

Mandatory Structural Source Control BMPs required by condition S3. of the Industrial Stormwater General Permit:

- Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations).
- Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and run-on and also that capture any overspray.
- Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the stormwater drainage system.

Condition S3. of the Industrial Stormwater General Permit requires Structural Source Control BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents as mandatory:

Mandatory Structural Source Control BMPs From Ecology’s Stormwater Management Manual for Western Washington:

Structural Source Control BMPs for Building, Repair, and Maintenance of Boats and Ships:

- Use fixed platforms with appropriate plastic or tarpaulin barriers as work surfaces and for containment when work is performed on a vessel in the water to prevent blast material or paint overspray from contacting stormwater or the receiving water. Use of such platforms will be kept to a minimum and at no time be used for extensive repair or construction

(anything in excess of 25 percent of the surface area of the vessel. Work above the water on the topsides is limited to the deck, and structures above the deck).

- Use plastic or tarpaulin barriers beneath the hull and between the hull and dry dock walls to contain and collect waste and spent materials. Clean and sweep regularly to remove debris.
- Enclose, cover, or contain blasting and sanding activities to the maximum extent practicable to prevent abrasives, dust, and paint chips, from reaching storm sewers or receiving water. Use plywood and/or plastic sheeting to cover open areas between decks when sandblasting (scuppers, railings, freeing ports, ladders, and doorways).
- Direct deck drainage to a collection system sump for settling and/or additional treatment.
- Store batteries in a covered secondary container.
- Apply source control BMPs for other activities conducted at the marina, boat yard, shipyard, or port facility (BMPs for Fueling at Dedicated Stations, BMPs for Washing and Steam Cleaning Vehicle/ Equipment/Building Structures, and BMPs for Spills of Oil and Hazardous Substances).

Structural Source Control BMPs for Commercial Composting:

- Compost pads are required for all uncovered facilities in areas of the state with wet climates (per water quality regulations).
- Provide curbing for all compost pads to prevent stormwater run-on and leachate run-off.
- Slope all compost pads sufficiently to direct leachate to the collection device.
- Provide one or more sumps or catch basins capable of collecting all leachate generated by the design storm and conveying it to the leachate holding structure for all compost pads.

Structural Source Control BMPs for Commercial Printing Operations:

- Store raw materials or waste materials that could contaminate stormwater in covered and contained areas.

Structural Source Control BMPs for Fueling At Dedicated Stations:

- Design the fueling island to control spills (dead-end sump or spill control separator in compliance with the UFC), and to treat collected stormwater and/or wastewater to required levels. Slope the concrete containment pad around the fueling island toward drains; either trench drains, catch basins and/or a dead-end sump. The slope of the drains shall not be less than 1 percent (Section 7901.8 of the UFC). Drains to treatment shall have a shutoff valve, which must be closed in the event of a spill. The spill control sump must be sized in compliance with Section 7901.8 of the UFC; or
- Design the fueling island as a spill containment pad with a sill or berm raised to a minimum of four inches (Section 7901.8 of the UFC) to prevent the runoff of spilled liquids and to prevent run-on of stormwater from the surrounding area. Raised sills are not required at the open-grate trenches that connect to an approved drainage-control system.
- The fueling pad must be paved with Portland cement concrete, or equivalent. Asphalt is not considered an equivalent material.
- The fueling island must have a roof or canopy to prevent the direct entry of precipitation onto the spill containment pad (see Figure 2.1). The roof or canopy should, at a minimum, cover

the spill containment pad (within the grade break or fuel dispensing area) and preferably extend several additional feet to reduce the introduction of windblown rain. Convey all roof drains to storm drains outside the fueling containment area.

- Stormwater collected on the fuel island containment pad must be conveyed to a sanitary sewer system, if approved by the sanitary authority; or to an approved treatment system such as an oil/water separator and a basic treatment BMP. (Basic treatment BMPs are listed in Volume V and include media filters and biofilters) Discharges from treatment systems to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain greater than a significant amount of oil and grease.
- Alternatively, stormwater collected on the fuel island containment pad may be collected and held for proper off site disposal.
- Conveyance of any fuel-contaminated stormwater to a sanitary sewer must be approved by the local sewer authority and must comply with pretreatment regulations (WAC 173-216-060). These regulations prohibit discharges that could "cause fire or explosion. An explosive or flammable mixture is defined under state and federal pretreatment regulations, based on a flash point determination of the mixture. If contaminated stormwater is determined not to be explosive, then it could be conveyed to a sanitary sewer system.
- Transfer the fuel from the delivery tank trucks to the fuel storage tank in impervious contained areas and ensure that appropriate overflow protection is used. Alternatively, cover nearby storm drains during the filling process and use drip pans under all hose connections.

Structural Source Control BMPs for Loading and Unloading Areas for Liquid or Solid Material:

All Loading/ Unloading Areas:

- Consistent with Uniform Fire Code requirements (Appendix IV-D R.2) and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building, under a roof, or lean-to, or other appropriate cover.
- Berm, dike, and/or slope the loading/unloading area to prevent run-on of stormwater and to prevent the runoff or loss of any spilled material from the area.
- Large loading areas frequently are not curbed along the shoreline. As a result, stormwater passes directly off the paved surface into surface water. Place curbs along the edge, or slope the edge such that the stormwater can flow to an internal storm drain system that leads to an approved treatment BMP.
- Pave and slope loading/unloading areas to prevent the pooling of water. The use of catch basins and drain lines within the interior of the paved area must be minimized as they will frequently be covered by material, or they should be placed in designated "alleyways" that are not covered by material, containers or equipment.

Loading and Unloading Docks:

- Install/maintain overhangs, or door skirts that enclose the trailer end (see Figures 2.4 and 2.5) to prevent contact with rainwater.
- Design the loading/unloading area with berms, sloping, etc. to prevent the run-on of stormwater.
- Retain on-site the necessary materials for rapid cleanup of spills.

Tanker Truck Transfer Areas to Above/Below-Ground Storage Tanks:

- Pave the area on which the transfer takes place. If any transferred liquid, such as gasoline, is reactive with asphalt pave the area with Portland cement concrete.
- Slope, berm, or dike the transfer area to a dead-end sump, spill containment sump, a spill control (SC) oil/water separator, or other spill control device. The minimum spill retention time should be 15 minutes at the greater flow rate of the highest fuel dispenser nozzle through-put rate, or the peak flow rate of the 6-month, 24-hour storm event over the surface of the containment pad, whichever is greater. The volume of the spill containment sump should be a minimum of 50 gallons with an adequate grit sedimentation volume.

Structural Source Control BMPs for Log Sorting and Handling:

Required Structural Source Control BMPs are presented in detail in Ecology's Guidance Document: "Industrial Stormwater General Permit Implementation Manual for Log Yards.

Structural Source Control BMPs for Maintenance and Repair of Vehicles and Equipment:

- Conduct all maintenance and repair of vehicles and equipment in a building, or other covered impervious containment area that is sloped to prevent run-on of uncontaminated stormwater and runoff of contaminated stormwater.
- The maintenance of refrigeration engines in refrigerated trailers may be conducted in the parking area with due caution to avoid the release of engine or refrigeration fluids to storm drains or surface water.
- Park large mobile equipment, such as log stackers, in a designated contained area.
- The Structural Source Control BMPs for the following are also required: Fueling at Dedicated Stations; Washing and Steam Cleaning Vehicle/Equipment/Building Structures; Loading and Unloading Areas for Liquid or Solid Material; Storage of Liquids in Permanent Above-Ground Tanks; Storage of Liquid, Food Waste, or Dangerous Waste Containers; Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products; Spills of Oil and Hazardous Substances; Illicit Connections to Storm Drains.

Structural Source Control BMPs for Mobile Fueling of Vehicles and Heavy Equipment:

- Automatic fuel transfer shut-off nozzles; and,
- An adequate lighting system at the filling point.

Structural Source Control BMPs for Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

- Enclose and/or contain all work while using a spray gun or conducting sand blasting and in compliance with applicable air pollution control, OSHA, and WISHA requirements. Do not conduct outside spraying, grit blasting, or sanding activities during windy conditions which render containment ineffective.

Structural Source Control BMPs for Recyclers and Scrap Yards:

For facilities subject to Ecology's Industrial Stormwater General Permit refer to BMP Guidance Document "Vehicle and Metal Recyclers – A Guide for Implementing the Industrial Stormwater General Permit Requirements," for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

Structural Source Control BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

- Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is impracticable due to site constraints or Uniform Fire Code requirements.
- Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills. The secondary containment shall be sloped to drain into a dead-end sump for the collection of leaks and small spills.
- For liquid wastes, surround the containers with a dike as illustrated in Figure 2.10. The dike must be of sufficient height to provide a volume of either 10 percent of the total enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater, or, if a single container, 110 percent of the volume of that container.
- Where material is temporarily stored in drums, a containment system can be used as illustrated, in lieu of the above system.
- Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer.

Structural Source Control BMPs for Storage of Liquids in Permanent Above-ground Tanks:

- Locate permanent tanks in impervious (Portland cement concrete or equivalent) secondary containment surrounded by dike or UL Approved double-walled. The dike must be of sufficient height to provide a containment volume of either 10 percent of the total enclosed tank volume or 110 percent of the volume contained in the largest tank, whichever is greater, or, if a single tank, 110 percent of the volume of that tank.
- Slope the secondary containment to drain to a dead-end sump (optional), or equivalent, for the collection of small spills.
- Include a tank overfill protection system to minimize the risk of spillage during loading.

Structural Source Control BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

- Store in a building or paved and bermed covered area (include berm if needed)
- Place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent) over the material.
- Pave the area and install a stormwater drainage system. Place curbs or berms along the perimeter of the area to prevent the run-on of uncontaminated stormwater and to collect and convey runoff to treatment. Slope the paved area in a manner that minimizes the contact between stormwater (e.g., pooling) and leachable materials in compost, logs, bark, wood chips, etc.

- For large stockpiles that cannot be covered, implement containment practices at the perimeter of the site and at any catch basins as needed to prevent erosion and discharge of the stockpiled material offsite or to a storm drain. Ensure that contaminated stormwater is not discharged directly to catch basins without conveying through a treatment BMP.

Structural Source Control BMPs for Wood Treatment Areas:

- Cover and/or enclose, and contain with impervious surfaces, all wood treatment areas. Slope and drain areas around dip tanks, spray booths, retorts, and any other process equipment in a manner that allows return of treatment chemicals to the wood treatment process.
- Cover storage areas for freshly treated wood to prevent contact of treated wood products with stormwater. Segregate clean stormwater from process water. Ensure that all process water is conveyed to an approved treatment system.
- Seal any holes or cracks in the asphalt areas that are subject to wood treatment chemical contamination.
- Elevate stored, treated wood products to prevent contact with stormwater run-on and runoff
- Place dipped lumber over the dip tank, or on an inclined ramp for a minimum of 30 minutes to allow excess chemical to drip back to the dip tank.
- Place treated lumber either from dip tanks or retorts in a covered paved storage area for at least 24 hours before placement in outside storage. Use a longer storage period during cold weather unless the temporary storage building is heated. The wood shall be drip free and surface dry before it is moved outside.

Mandatory Treatment BMPs required by condition S3. of the Industrial Stormwater General Permit:

- Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
- Obtain Ecology approval before beginning construction/installation of all treatment BMPs that include the addition of chemicals to provide treatment.

Condition S3. of the Industrial Stormwater General Permit requires Treatment BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents as mandatory:

Mandatory Treatment BMPs From Ecology’s Stormwater Management Manual for Western Washington:

Treatment BMPs for Commercial Composting:

- Convey all leachate from composting operations to a sanitary sewer, holding tank, or on-site treatment systems designed to treat the leachate and TSS.
- Ponds used to collect, store, or treat leachate and other contaminated waters associated with the composting process must be lined to prevent ground water contamination. Apply “AKART” or All Known Available and Reasonable Methods of Prevention and Treatment to all pond liners, regardless of the construction materials.

Treatment BMPs for Log Sorting and Handling:

Required Treatment BMPs are presented in detail in Ecology's Guidance Document: "Industrial Stormwater General Permit Implementation Manual for Log Yards.

Treatment BMPs for Maintenance and Repair of Vehicles and Equipment:

- Contaminated stormwater runoff from vehicle staging and maintenance areas must be conveyed to a sanitary sewer, if allowed by the local sewer authority, or to an API or CP oil and water separator followed by a basic treatment BMP, applicable filter, or other equivalent oil treatment system.

Treatment BMPs for Parking and Storage of Vehicles and Equipment:

- An oil removal system such as an API or CP oil and water separator, catch basin filter, or equivalent BMP, approved by the local jurisdiction, is applicable for parking lots meeting the threshold vehicle traffic intensity level of a high-use site.

A high-use site is:

- Subject to an expected average daily vehicle traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area: or
- Is subject to storage of a fleet of 25 or more diesel vehicles that are over 10 tons gross weight (trucks, buses, trains, heavy equipment, etc.).

Treatment BMPs for Railroad Yards:

- In areas subjected to leaks/spills of oils or other chemicals convey the contaminated stormwater to appropriate treatment such as a sanitary sewer, if approved by the appropriate sewer authority, or, to a CP or API oil/water separator for floating oils, or other treatment, as approved by the local jurisdiction.

Treatment BMPs for Recyclers and Scrap Yards:

For facilities subject to Ecology's Industrial Stormwater General Permit refer to BMP Guidance Document "Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities," for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

Treatment BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

- For contaminated stormwater in the containment area, connect the sump outlet to a sanitary sewer, if approved by the local Sewer Authority, or to appropriate treatment such as an API or CP oil/water separator, catch basin filter or other appropriate system (see Volume V). Equip the sump outlet with a normally closed valve to prevent the release of spilled or leaked

liquids, especially flammables (compliance with Fire Codes), and dangerous liquids. This valve may be opened only for the conveyance of contaminated stormwater to treatment.

- Another option for discharge of contaminated stormwater is to pump it from a dead-end sump or catchment to a tank truck or other appropriate vehicle for off-site treatment and/or disposal.

Treatment BMPs for Storage of Liquids in Permanent Above-ground Tanks:

- If the tank containment area is uncovered, equip the outlet from the spill-containment sump with a shutoff valve, which is normally closed and may be opened, manually or automatically, only to convey contaminated stormwater to approved treatment or disposal, or to convey uncontaminated stormwater to a storm drain. Evidence of contamination can include the presence of visible sheen, color, or turbidity in the runoff, or existing or historical operational problems at the facility. Simple pH measurements with litmus or pH paper can be used for areas subject to acid or alkaline contamination.
- At petroleum tank farms, convey stormwater contaminated with floating oil or debris in the contained area through an API or CP-type oil/water separator or other approved treatment prior to discharge to storm drain or surface water.

Treatment BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

- Convey contaminated stormwater from the stockpile area to a wet pond, wet vault, settling basin, media filter, or other appropriate treatment system depending on the contamination.

Mandatory Erosion and Sediment Control BMPs required by condition S3. of the Industrial Stormwater General Permit:

- Sediment control BMPs such as detention or retention ponds or traps, vegetated filter strips, bioswales, or other permanent sediment control BMPs to minimize sediment loads in stormwater discharges.
- Filtration BMPs to remove solids from catch basins, sumps or other stormwater collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

Mandatory BMPs for Deicing and Anti-Icing Operations - Airports and Streets from Ecology's Stormwater Management Manual for Western Washington:

BMPs for Aircraft:

- Conduct aircraft deicing or anti-icing applications in impervious containment areas. Collect aircraft deicer or anti-icer spent chemicals, such as glycol, draining from aircraft in deicing or anti-icing application areas and convey to a sanitary sewer, treatment, or other approved disposal or recovery method. Divert deicing runoff from paved gate areas to appropriate collection areas or conveyances for proper treatment or disposal.

- Do not allow spent deicer or anti-icer chemicals or stormwater contaminated with aircraft deicer or anti-icer chemicals to be discharged from application areas including gate areas, to surface water, or ground water, directly or indirectly.
- Transfer deicing and anti-icing chemicals on an impervious containment pad, or equivalent spill/leak containment area, and store in secondary containment areas. (See Storage of Liquids in Above-Ground Tanks).

BMPs for Airport Runways/Taxiways:

- Avoid excessive application of all de/anti-icing chemicals, which could contaminate stormwater.
- Store and transfer de/anti-icing materials on an impervious containment pad or an equivalent containment area and/or under cover in accordance with BMP Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products in this volume. Other material storage and transfer approaches may be considered if it can be demonstrated that stormwater will not be contaminated with or that the de/anti-icer material cannot reach surface or ground waters.

BMPs for Streets/Highways:

- Select de and anti-icers that cause the least adverse environmental impact. Apply only as needed using minimum quantities.
- Where feasible and practicable use roadway deicers, such as calcium magnesium acetate, potassium acetate, or similar materials, that cause less adverse environmental impact than urea, and sodium chloride.
- Store and transfer de/anti-icing materials on an impervious containment pad in accordance with BMP Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products in this volume.
- Sweep/clean up accumulated de/anti-icing materials and grit from roads as soon as possible after the road surface clears.

Appendix F. Industrial Stormwater Monthly Inspection Report

Industrial Stormwater Monthly Inspection Report

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form in accordance with Permit Condition S9.C.

FACILITY NAME:	INSPECTION TIME:	DATE:		
WEATHER INFORMATION: 1. Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): <hr/> <hr/> <hr/> 2. Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: <hr/> <hr/> <hr/>				
I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
SWPPP and Site Map: Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection. <ul style="list-style-type: none"> • Is the Site Map current and accurate? • Is the SWPPP inventory of activities, materials and products current? <p>Any new potential pollutant sources must be added to the map and reflected in the <i>SWPPP Facility Assessment & Tables 2, 2A, 3 and 5</i>.</p>	Yes	No	Findings and Remedial Action Documentation: Describe any findings below and the schedule for remedial action completion including the date initiated and date completed or expected to be completed.	
Vehicle/Equipment Areas: Equipment cleaning: Check NA if not performed on-site. Skip section. Is equipment washed and/or cleaned only in designated areas? <ul style="list-style-type: none"> • Observe washing: Is all wash water captured and properly disposed of? Equipment fueling: Check NA if not performed on-site. Skip section. <ul style="list-style-type: none"> • Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? • Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? • Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> ○ If not, is there any water or other fluids accumulated within the containment area? ○ Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of. 	Yes	No	NA	Findings and Remedial Action Documentation:

<p>Equipment maintenance:</p> <ul style="list-style-type: none"> • Are maintenance tools, equipment and materials stored under shelter, elevated and covered? • Are all drums and containers of fluids stored with proper cover and containment? • Are exteriors of containers kept outside free of deposits? • Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. • Is there evidence of leaks or spills since last inspection? Identify and address. • Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)? <p>Add any additional site-specific BMPs:</p> <hr/> <hr/> <hr/> <hr/>	Yes	No	NA	<p>Findings and Remedial Action Documentation:</p>
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I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
<p>Good Housekeeping BMPs:</p> <p>1) Are paved surfaces free of accumulated dust/sediment and debris?</p> <ul style="list-style-type: none"> • Date of last quarterly vacuum/sweep _____ • Are there areas of erosion or sediment/dust sources that discharge to storm drains? <p>2) Are all waste receptacles located outdoors:</p> <ul style="list-style-type: none"> • In good condition? • Not leaking contaminants? • Closed when is not being accessed? • External surfaces and area free of excessive contaminant buildup? <p>3) Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?</p> <ul style="list-style-type: none"> • External dock areas • Pallet, bin, and drum storage areas • Maintenance shop(s) • Equipment staging areas (loaders, tractors, trailers, forklifts, etc) • Around bag-house(s) • Around bone yards • Other areas of industrial activity: <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	Yes	No	NA	<p>Findings and Remedial Action Documentation:</p>

Spill Response and Equipment: Are spill kits available, in the following locations? <ul style="list-style-type: none"> Fueling stations Transfer and mobile fueling units Vehicle and equipment maintenance areas Do the spill kits contain all the permit required items? <ul style="list-style-type: none"> Oil absorbents capable of absorbing 15 gallons of fuel. A storm drain plug or cover kit. A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity. A non-metallic shovel. Two five-gallon buckets with lids. Are contaminated absorbent materials properly disposed of?	Yes	No	N A	Findings and Remedial Action Documentation:
I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
General Material Storage Areas: <ul style="list-style-type: none"> Are damaged materials stored inside a building or another type of storm resistance shelter? Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater? Are scrap metal bins covered? Are outdoor containers covered? 	Yes	No	N A	Findings and Remedial Action Documentation:
Stormwater BMPs and Treatment Structures: Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map. <ul style="list-style-type: none"> Are BMPs and treatment structures in good repair and operational? Are BMPs and treatment structures free from debris buildup that may impair function? The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned? Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition? 	Yes	No	N A	Findings and Remedial Action Documentation:
Observation of Stormwater Discharges: <ul style="list-style-type: none"> Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). Were any illicit discharges observed during the inspection? 	Yes	No	N A	Findings and Remedial Action Documentation:

II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Inspector - Certification: This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority (see Permit Condition G2) or a duly authorized representative of that person.

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ *The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.*

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

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Inspector's Name – Printed	Inspector's Signature	Inspector's Title	Date
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Permittee – Certification:

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ *The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.*

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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PRINTED NAME of person with Signature Authority (permit condition G2.A) or a Duly Authorized Representative¹	SIGNATURE of person with Signature Authority (permit condition G2.A) or a Duly Authorized Representative¹	DATE
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¹A person is duly authorized representative only if 1) the authorization is made in writing by a person described in Permit Condition G2.A and submitted to Ecology, and 2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

10.3 Attachment C: RCRA Permit

[HOME](#)[FORMS](#)[PROFILE](#)[ADMIN](#)[Site Profile](#)**User:** c nolte **Role:** Administrator [Log Off](#)**RCRA Site ID:** WAD988518239**Facility/Site ID:** 42127616Pacific Pile & Marine
700 S RIVERSIDE DR
Transfer Facility
SEATTLE, WA 98108

Your electronic submission to Ecology was successful. Thank you.

Please note that submission confirmation messages from Ecology may be blocked by some anti-viral software. If you do not receive your confirmation message, please contact your email administrator.

Start a New Report[Create New Annual Report](#)**Work In Progress
(Unsubmitted Data)**

All records for this site have been submitted.

Other Options[View Submitted Data](#)[Update Notification](#)[Open Pre-printed Site ID Form](#)**Current Site Information****Location Info**700 S RIVERSIDE DR
SEATTLE, WA 98108
KINGTax Registration: 602825156
NAICS Code: 237990
Business Type: Other Heavy & Civil Eng**Mailing Address**Pacific Pile & Marine LP
700 S Riverside Dr
Seattle, WA 98108
UNITED STATES**Legal Owner**Pacific Pile & Marine LP
700 S Riverside Dr
Seattle, WA 98108
UNITED STATES
206-331-3873
Org Type: Private**Land Owner**Harald L Hurlen
21512 Miller Bay Rd
Poulsbo, WA 98370
UNITED STATES
(239)281-6018
Org Type: Private**Operator Address**Pacific Pile & Marine LP
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Seattle, WA 98108
UNITED STATES
206-331-3873
Org Type: Private**Site Contact**Carrie Nolte
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Seattle, WA 98108
UNITED STATES
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Email: carrien@pacificpile.com

Forms Contact

Carrie Nolte
700 S Riverside Dr
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Waste Activities

No Regulated Waste Generated (XQG)